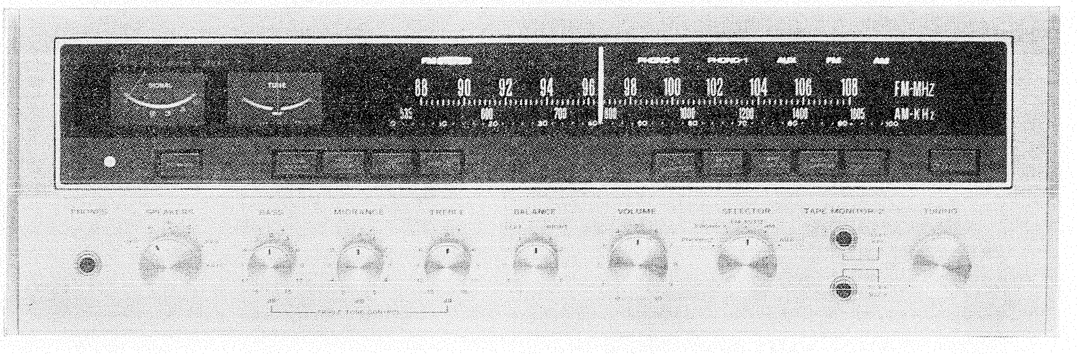
OPERATING INSTRUCTIONS & SERVICE MANUAL

STEREO RECEIVER

SANSUI SEVEN


SIGNAL
TUNE
88 90 92 94 96 98 100 102 104 106 108 FM-MHz
535 600 700 800 1000 1200 1400 1605 AM-KHz
PHONES
SPEAKERS
BASS
MIDRANGE
TREBLE
BALANCE
VOLUME
SELECTOR
TAPE MONITOR 2
TUNING

Sansui

SANSUI ELECTRIC CO., LTD.

Congratulations on joining the thousands of proud, satisfied owners of quality stereo components from Sansui, Japan's foremost audio-only specialist.

In many ways, the SEVEN is a culmination of our long experience and arduous research in the design and manufacture of quality audio-only equipment.

Its tuner section combines an FET-equipped super sensitive FM frontend and an IC-equipped FM IF amplifier which ensures outstanding FM selectivity and superb tone quality.

Its amplifier section is a 160-watt masterpiece designed, tested and proven to bring out every subtle shade of the original sound, regardless of the program source, free from distortion.

Over-all, the receiver is equipped with practically all the switches, controls, inputs and outputs that you would ever need to enjoy today's most advanced hi-fi sound reproduction.

This manual has been prepared to guide you in operating and caring for the receiver correctly, so that you will get the most out of its built-in high performance and exceptional versatility. May we suggest that you read it once carefully?

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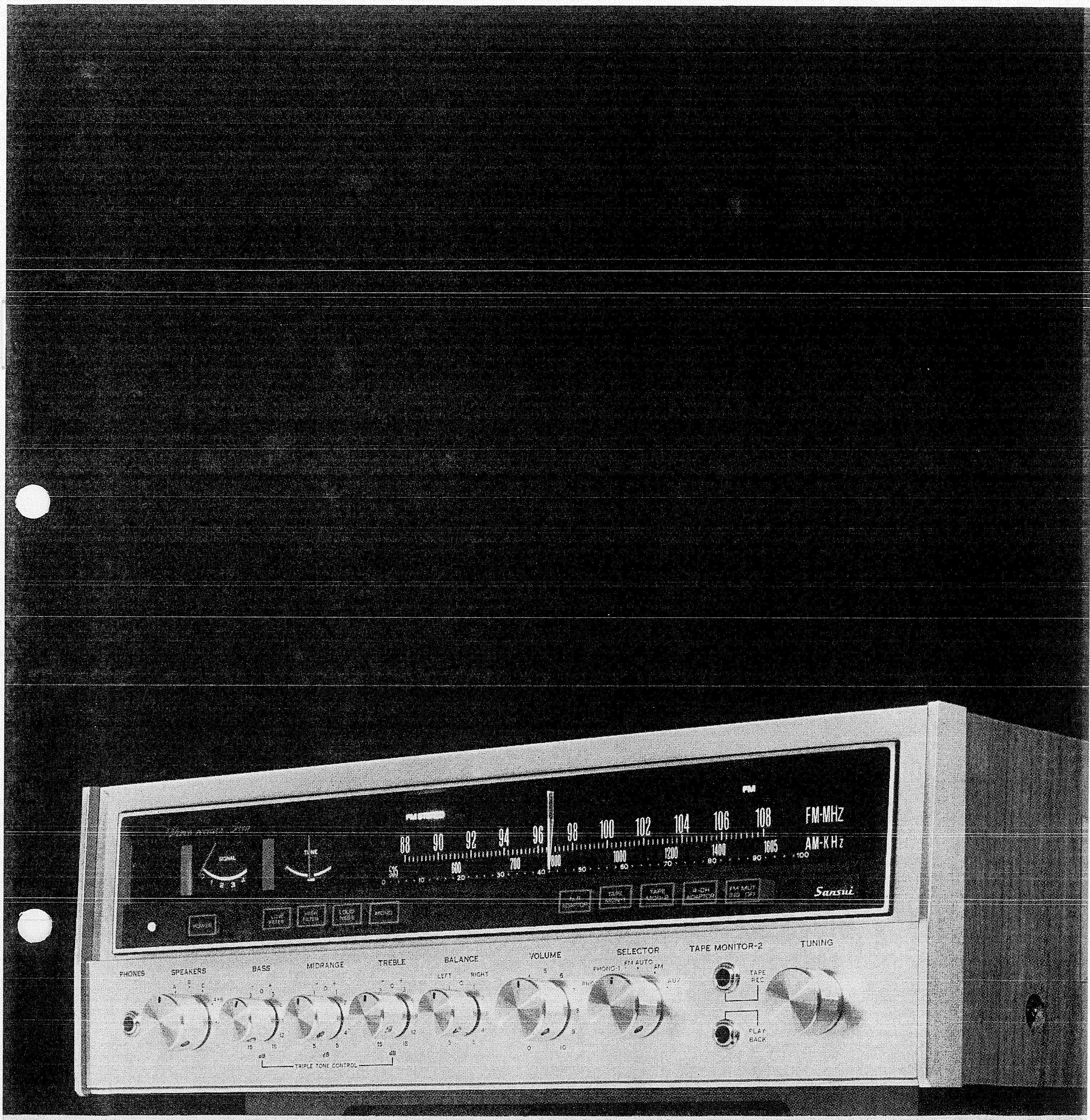

FM STEREO
FM
88 90 92 94 96 98 100 102 104 106 108 FM-MHZ
535 600 700 800 1000 1200 1400 1605 AM-KHz
SIGNAL
TUNE
POWER
LOW FILTER
HIGH FILTER
LOUDNESS
MONO
4-CH ADAPTOR
TAPE MONITOR
TAPE MONITOR
4-CH ADAPTOR
FM MUTING OFF
Sansui
PHONES
SPEAKERS
BASS
MIDRANGE
TREBLE
BALANCE
LEFT
RIGHT
VOLUME
SELECTOR
PHONO-1
FM AUTO
AM
AUX
TAPE MONITOR-2
TAPE REC
PLAY BACK
TUNING
TRIPLE TONE CONTROL

SWITCHES AND CONTROLS

Explained on the left are the functions of the various switches and controls located on the front panel of your SEVEN. They are all designed and located to give you maximum control of the receiver with the greatest ease. Read the instructions once and you'll find every one of them is very easy to operate.
The Opereting Instructions Sheet, accompanying this bookelt, carries the same information in a condensed form, for future quick references.

Noise Filter Switches

LOW: Push to cut off low-frequency noise such as the rumbling of the turntable motor.
HIGH: Push to cut off high-frequency noise such as the scratch noise of a worn record, tape hiss or the whisle noise in radio broadcasts.
Leave the switches off at all other times.

Power Switch

Push once to turn on the power supply for the entire receiver, once more to turn off.

Power Indicator

Headphone Jack

Accommodates a stereo headphone set for monitoring and private listening. When listening with headphones, turn the Speaker Selector to' OFF.' The headphones used should be a dynamic type.

Speaker Selector

OFF: To cut off the sound from the speaker systems when listening with headphones.
A: To drive the speaker systems connected to the SYSTEM A terminals.
B: To drive the ones connected to the SYSTEM B terminals.
C: To drive the ones connected to the SYSTEM C terminals.
A+B: To drive both A and B pairs of speaker systems.
A+C: To drive both A and C pairs of speaker systems.

Tuning and Signal Meters

The desired FM station is pinpointed when the Signal Meter pointer has swung as far to the right as possible and the Tuning Meter pointer is perfectly centered.

An AM station, in contrast, is correctly tuned in when the Signal Meter pointer has swung as far to the right as it will go. You need not pay attention to the Tuning Meter.

Loudness Switch

The human ear is such that an apparent 'drop-out' of the lows and highs occurs when you're listening at a low volume level. Pushing this switch compensates for this apparent loss and appropriately accents the lows and highs.

FM Stereo Indicator

Lights when the receiver is tuned to an FM station broadcasting in stereo.

Mono Switch

Push to hear in mono whatever program source you may have adjusted the receiver to reproduce.

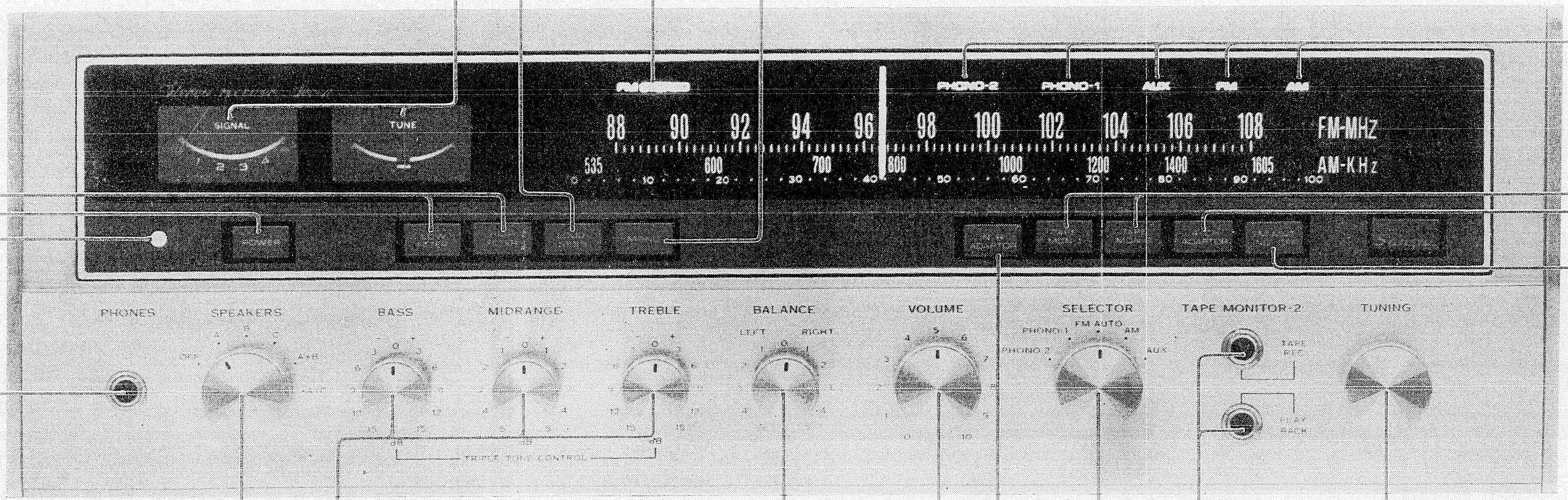
Function Indicators

Tape Monitor Switches

These switches control tape monitor circuits 1 and 2. See p. 9 of Operating Instructions for detailed instructions on the operation of tape decks.

4-Channel Adaptor Switch

If you connect a 4-channel adaptor to the SEVEN and make other necessary connections, you will be able to upgrade this 2-channel stereo receiver to 4-channel stereo capabilities by pushing this switch (refer to p. 10 of Operating Instructions). Otherwise, be sure to keep it off.



FM Muting Release Switch

This switch, if not depressed, eliminates the interstation noise commonly heard when tuning on the FM band. It should be pushed to release the muting function when you are trying to tune in a weak FM station.

Tuning Control

Tune in the desired station by turning this control.

Triple Tone Controls

BASS: Use to strengthen or weaken the receiver's low-end response. Turn it clockwise to emphasize the lows by 3dB per step.

MIDRANGE: Use to strengthen or weaken the midrange response. Turn it clockwise to emphasize the midranges by 1dB per step.

TREBLE: Use to strengthen or weaken the high-end response. Turn it clockwise to emphasize the highs by 3dB per step.

Volume Control

Turn it clockwise to raise the volume.

Balance Control

Use to balance the left and right channels.

N.R. Adaptor Switch

If you connect a noise reduction adaptor to the SEVEN and want to record or reproduce on a tape deck via such adaptor, push this switch.

Selector Control

Depending on what you wish to hear, turn to the appropriate position.

PHONO 2: Selects a turntable connected to the PHONO 2 inputs.

PHONO 1: Selects the one connected to the PHONO 1 inputs.

FM AUTO: To hear FM broadcasts, whether stereo or mono.

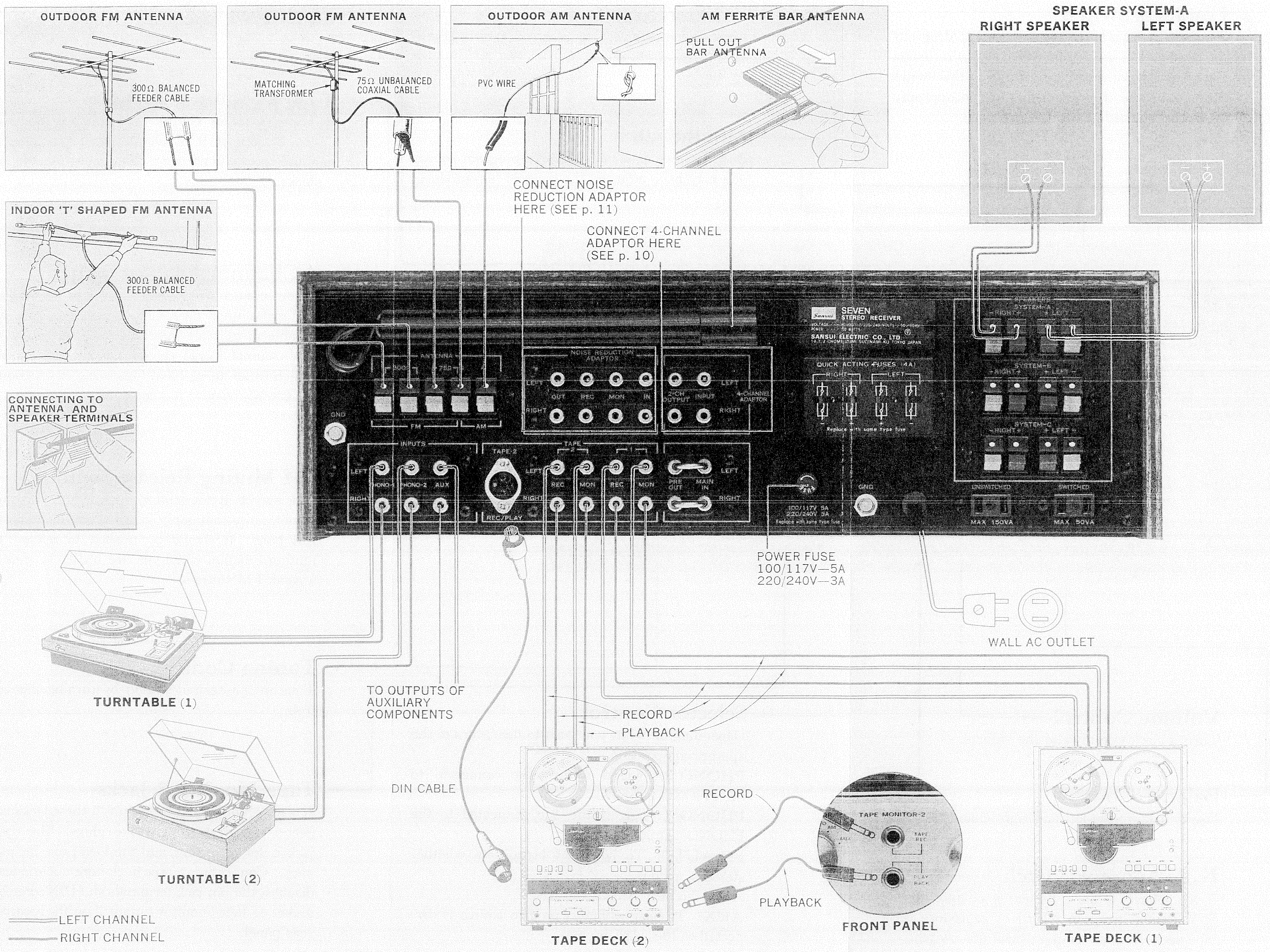
AM: To hear AM broadcasts.

AUX: To hear whatever progrm source is connected to the AUX inputs.

Tape Monitor-2 Jacks

A part of tape monitor circuit 2, these jacks connect a tape deck with phone plugs. The upper jack is for recording, and the lower one for playback. Connecting a tape deck here automatically disables the pin jack terminals and DIN connector socket of tape monitor circuit 2 on the receiver's rear panel.

CONNECTIONS


OUTDOOR FM ANTENNA
300Ω BALANCED FEEDER CABLE
OUTDOOR FM ANTENNA
MATCHING TRANSFORMER
75Ω UNBALANCED COAXIAL CABLE
OUTDOOR AM ANTENNA
PVC WIRE
AM FERRITE BAR ANTENNA
PULL OUT BAR ANTENNA
SPEAKER SYSTEM-A
RIGHT SPEAKER
LEFT SPEAKER
INDOOR 'T' SHAPED FM ANTENNA
300Ω BALANCED FEEDER CABLE
CONNECTING TO ANTENNA AND SPEAKER TERMINALS
CONNECT NOISE REDUCTION ADAPTOR HERE (SEE p. 11)
CONNECT 4-CHANNEL ADAPTOR HERE (SEE p. 10)
SEVEN
STEREO RECEIVER
SANSUI ELECTRIC CO., LTD.
QUICK ACTING FUSES (4A)
NOISE REDUCTION ADAPTOR
4-CHANNEL ADAPTOR
ANTENNA
FM
AM
GND
INPUTS
PHONO-1
PHONO-2
AUX
TAPE-2
REC/PLAY
TAPE
REC
MON
PRE OUT
MAIN IN
SYSTEM-B
SYSTEM-C
UNSWITCHED
SWITCHED
MAX 150VA
MAX 50VA
POWER FUSE
100/117V—5A
220/240V—3A
WALL AC OUTLET
TURNTABLE (1)
TO OUTPUTS OF AUXILIARY COMPONENTS
RECORD
PLAYBACK
TURNTABLE (2)
DIN CABLE
RECORD
TAPE MONITOR-2
PLAYBACK
FRONT PANEL
TAPE DECK (2)
TAPE DECK (1)
LEFT CHANNEL
RIGHT CHANNEL

Connecting Speaker Systems

The SEVEN connects up to three pairs of speaker systems. Any pair may be driven independently or a combination of two pairs may be driven, as selected by the Speaker Selector. Connect them to the receiver as instructed in the diagram on the left, taking care not to confuse the left and right channels and the plus and minus leads. Also, be very careful not to short-circuit the plus and minus leads.

About the Speaker Impedance

Each speaker system connected to your SEVEN must possess an impedance of 4 to 16 ohms. Should you wish to drive two pairs of speaker systems simultaneously (by turning the Speaker Selector to the 'A+B' or 'A+C' position), each of them must have an impedance of 8 ohms or more.

Connecting Antennas

FM Antennas

T-Shaped Feeder Antenna

If you live in the proximity of broadcast stations, quality reception can be usually obtained by just setting up the T-shaped feeder cable antenna supplied with the receiver. Connect the antenna to the receiver's FM 300Ω terminals, set up the receiver for FM reception, stretch the antenna to a full T shape, and adjust its height and direction until the best reception is obtained.

Outdoor FM Antenna

Should the feeder cable antenna described above fail to give you a clear reception, try installing an outdoor FM antenna.

While many different types of antenna are commercially available, it is advisable to use one with at least 5 or 7 elements.

Using feeder cable, connect such antenna to the FM 300Ω antenna terminals of the receiver. Observe the following suggestions when connecting it:

1. As an antenna is directional, locate and orient the antenna in the place and direction which give you the best reception. Actually listen to your favorite FM station while you make the adjustments.

2. Be sure not to let the antenna touch electric cables and other objects.

3. Arrange the route of the feeder cable so as to keep it as short as possible.

4. Try to keep the antenna as far from streets as possible to prevent picking up the noise generated by automobiles.

If you should need long feeder cable to connect the antenna or where the automobile traffic is heavy, it is advisable to employ 75Ω coaxial cable. In this case, however, it is necessary to connect a matching transformer between the antenna and the coaxial cable to match their impedances. Be sure to connect the cable to the FM 75Ω terminals. (If the antenna itself has an impedance of 75Ω, no matching transformer is needed.)

AM Antenna

Ferrite Bar Antenna

The highly sensitive AM ferrite bar antenna, provided on the rear of the receiver, is usually sufficient to obtain a quality reception of AM stations. To use, simply pull it out as illustrated.

Outdoor AM Antenna

Should the bar antenna fail to give you a clear reception, however, connect a piece of PVC wire supplied to the AM-A terminal on the receiver's rear panel and extend it outside a window or on the roof. Still better results can be obtained if you ground the receiver.

Connecting Turntables

As the SEVEN is equipped with two phono input circuits, it is possible to employ two turntables or two tonearms with magnetic cartridges.

Connect the output cables of the turntable to the PHONO 1 or 2 input terminals. Be sure to keep the left and right channel cables in proper order.

Note:

1. If you wish to use a moving-coil (MC) type cartridge, be sure to employ either a step-up transformer or separate head amplifier between the turntable and the SEVEN.

2. If you wish to use a ceramic or crystal type cartridge, connect the outputs of the turntable to the receiver's AUX input terminals.

Connecting Tape Decks

The SEVEN is provided with two tape monitor circuits. One has pin jack terminals, while the other has pin jack terminals, a DIN connector socket and phone type jacks. If you are connecting only one tape deck, you are absolutely free to use any terminals which are most convenient to you. But if you are connecting two tape decks, be sure to connect one of them to the first tape monitor circuit, and the other to any terminals of the second tape monitor circuit.

If Using Pin Jacks

If you are using the pin jack terminals to connect your tape deck, proceed as follows:

1. Connect a pair of shielded cables between the 'TAPE 1 (or 2) REC' pin jack terminals of the SEVEN and the recording input terminals of your tape deck.

2. Connect another pair of such cables between the receiver's 'TAPE 1 (or 2) MON' pin jack terminals and the tape deck's playback (monitor) output terminals.

Note: If you don't connect a 4-channel adaptor to the 4-CHANNEL ADAPTOR terminals on the rear panel, you may connect another tape deck to them. Use the 2-CH OUTPUT terminals as recording outputs, and INPUT terminals as playback inputs.

If Using the DIN Socket

In the rather unlikely event that your tape deck is equipped only with a DIN connector socket, plug the DIN connector cable extending from it into the 5-pin DIN connector socket (marked TAPE-2 REC/PLAY) on the receiver's rear panel.

If Using Phone Jacks

Should your tape deck be equipped with cables with phone type plugs, you may connect it to the phone jacks on the receiver's front panel. The tape deck's recording input plug should be inserted into the upper 'TAPE REC' jack, and its playback output plug into the lower 'PLAYBACK' jack.

Connecting a tape deck to the phone type jacks automatically disables the pin jack terminals and DIN connector socket of the second tape monitor circuit.

OPERATIONS

FM Reception

1. Set the Selector Control to 'FM AUTO.'

2. Tune in the desired FM station by turning the Tuning Control.

It is correctly pinpointed when the Signal Meter pointer has swung as far to the right as possible and the Tuning Meter pointer is acculately centered.

3. Use the various other controls and switches to suit your personal preference.

AM Reception

1. Set the Selector Control to 'AM.'

2. Tune in the desired AM station by turning the Tuning Knob until the Signal Meter pointer swings as far to the right as it will go near the frequency of that station. The Tuning Meter dose not operate for AM.

3. Use the various other controls and switches to suit your personal preference.

Playing Records

1. Set the Selector Control to 'PHONO 1' or 'PHONO 2,' depending on which input circuit you are using.

2. Start the turntable and play the record.

3. Use the various controls and switches to suit your personal preference.

Recording and Playback on Tape Decks

To Record into a Tape Deck

1. Set the receiver's Selector Control to the program source you want to record.

2. Start the tape deck in the recoding mode.

3. To monitor the sound being recorded, push the TAPE MON 1 or 2 Switch, depending on which of the two tape monitor circuits is accommodating the tape deck at the moment.

Note: Monitoring is possible only if the tape deck is equipped with separate heads for recording and playback.

To Reproduce a Recorded Tape

1. Push the TAPE MON 1 or 2 Switch, depending on which of the two tape monitor circuits is accommodating the tape deck at the moment.

2. Start the tape deck in the playback mode.

3. Use the various controls and switches to suit your personal preference.

Recoding into Two Tape Decks Simultaneously

1. Set the Selector Control to the program source you want to record.

2. Start both tape decks in the recording mode.

Recording from One Tape Deck into the Other

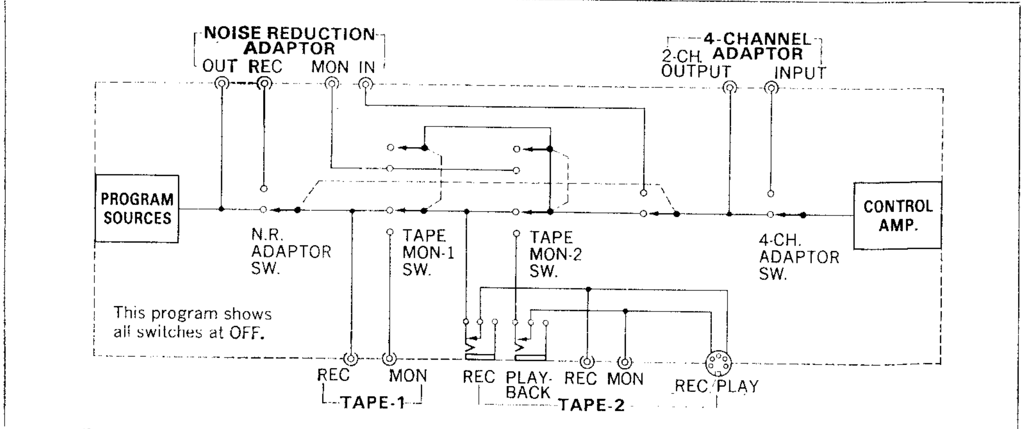
1. Push the TAPE MON 1 Switch.

2. Start the tape deck connected to the second tape monitor circuit, in the recording mode.

3. Now start the other tape deck (conneted to the first tape monitor circuit) in the playback mode.

Note: The copying (dubbing) of a recorded tape, as described above, is only possible from a tape deck connected to the first tape monitor circuit to the one connected to the second tape monitor circuit.

Signal Path Diagram of Tape Record/ Playback Circuit



4-CHANNEL STEREO SYSTEM

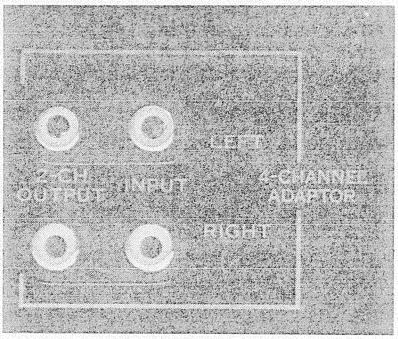
4-CHANNEL STEREO

The sound we daily hear is a mixture of the sounds that reach our ears straight from the sound source—be it a musical instrument, a jet, a man's mouth or what have you—and the 'indirect sounds' that arrive at our ears only after they are reflected off various surfaces, such as the walls, ceiling and so forth. Four-channel recordings are made using two microphones in the front of the concert hall and two in the rear (to simplify the explanation). The 'indirect sounds' with their complicated waveforms are mainly picked up by the two rear microphones and reproduced out of the two rear speakers in a 4-channel stereo set-up for greatly enhanced 'ambience' effects. The result is almost as if the original live performance were re-played right in your own room. This new approach can now be yours simply by adding certain equipment—mainly, a Sansui 4-channel rear amplifier and a second pair of speaker systems—to your 2-channel stereo system.

SANSUI 4-CHANNEL REAR AMPLIFIER QS-500

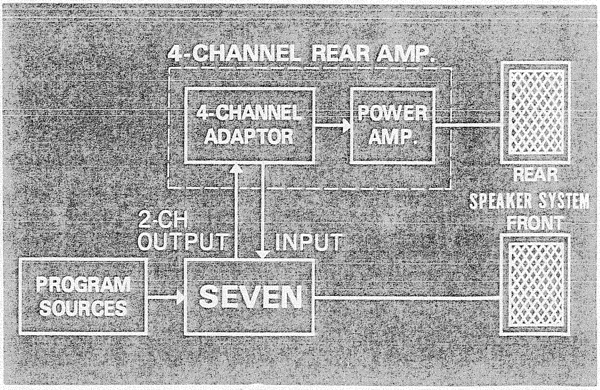
Connecting a 4-Channel Adaptor

Connection of such a rear amplifier or 4-channel adaptor is easy. Just connect the 4-CHANNEL ADAPTOR 2-CH. OUTPUT terminals of your SEVEN with the input terminals of such rear amplifier or 4-channel adaptor, then connect its 4-CHANNEL ADAPTOR INPUT terminals with the output terminals of such unit.


LEFT
2-CH OUTPUT
INPUT
4-CHANNEL ADAPTOR
RIGHT

Operation

To operate the rear amplifier or 4-channel adaptor so connected, push the 4CH ADAPTOR Switch on the receiver's front panel, and otherwise follow its manufacturer's instructions.


4-CHANNEL REAR AMP.
4-CHANNEL ADAPTOR
POWER AMP.
REAR
SPEAKER SYSTEM
FRONT
2-CH OUTPUT
INPUT
PROGRAM SOURCES
SEVEN

NOISE REDUCTION SYSTEM

About Noise Reduction Systems

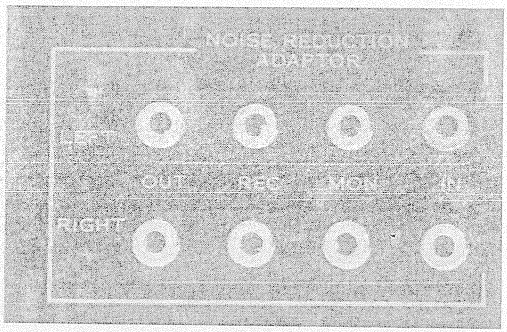
Tape hiss is the single greatest annoyance to tape recording enthusiasts. To eliminate this noise, several noise reduction systems have been developed to date.

The latest innovation in this area is called the Dolby system, which reduces tape hiss most effectively without affecting the tone quality of the program source sound. It involves compressing low-level signals (where tape hiss is most annoying) during recording and then expanding them during playback in exactly the opposite manner.

The Dolby system often more than doubles the stereo listening enjoyment. To take maximum advantage of it, you only need couple a commercially available Dolby Noise Reduction Adaptor to your SEVEN.

Connectiug a N.R. Adaptor

Connect the Noise Reduction (N.R.) Adaptor to the NOISE REDUCTION ADAPTOR jacks on your SEVEN.



Such adaptor usually has four pairs of jacks—two for connecting a tape deck, and two more for connecting an amplifier (in this case the SEVEN).

However, as your SEVEN is equipped with provisions for connecting up to two tape decks, it is better to connect your tape deck(s) to the SEVEN (refer to 'Connecting Tape Decks' on page 8).

With your tape deck(s) so connected, regard the NOISE REDUCTION ADAPTOR-OUT, -IN, -REC and -MON jacks on your SEVEN's rear panel as equivalent to these terminals:

OUT ...Tape recording output jacks of an amplifier.
IN ......Tape playback input jacks of an amplifier.
REC ...Recording input jacks of a tape deck.
MON...Playback output jacks of a tape deck.

With this in mind, make these connections between the SEVEN and the n.r. adaptor:

SEVEN N.R. Adaptor
OUT ...Input jacks of its recording circuit.
REC ...Output jacks of its recording circuit.
MON...Input jacks of its playback circuit.
IN ......Output jacks of its playback circuit.

Operating a N.R. Adaptor

Operate the n.r. adaptor correctly according to the instructions supplied by its manufacturer. Then it is simply a matter of operating your tape deck correctly for recording and playback and pushing the N.R. ADAPTOR Switch on the SEVEN's front panel.

Note: When you are recording via a two-circuit type Dolby Noise Reduction Adaptor, changing its mode switch from record to playback by mistake is likely to cause a loud oscillating phenomenon. Be very careful to avoid such mistake.

SIMPLE MAINTENANCE HINTS

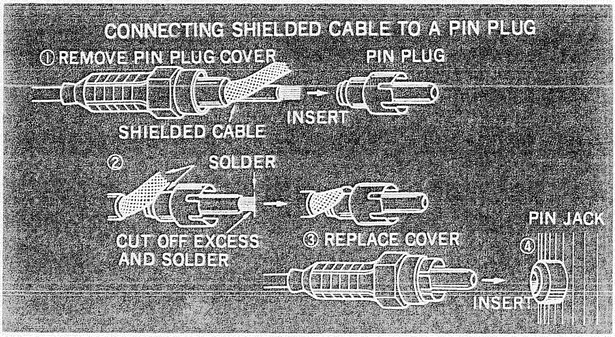
About the Place of Installation

The wooden cabinet of the SEVEN is designed so that any heat radiated inside will effectively escape through it. Proper care should therefore be taken of the dissipation of such heat if you wish to place something on top of the receiver or place it inside a closed box, etc. Above all, avoid placing it where it may be exposed to the direct sunlight.

When Connecting a Turntable, etc.

To connect a turntable, tape deck and so forth, it is strongly recommended to use thick, shielded cables with minimal distributed capacitance and to keep them as short as possible.

To solder the pin plugs supplied as accessories onto such shielded cables, refer to the illustration below.


CONNECTING SHIELDED CABLE TO A PIN PLUG
①REMOVE PIN PLUG COVER
PIN PLUG
INSERT
SHIELDED CABLE
②
SOLDER
CUT OFF EXCESS AND SOLDER
③REPLACE COVER
PIN JACK
④
INSERT

Hum and Howling

Care must be taken never to place a turntable on or too near a speaker system, or the vibration of the speaker system is transmitted and causes howling. It is best to keep these components completely separate but if this is impossible, place a thick cushion between them.

Humming is a phenomenon caused by incomplete or incorrect turntable-receiver connections. Should this occur, check to see if all connections are completely made and if the connecting cables are sufficiently thick.

PM Connectors

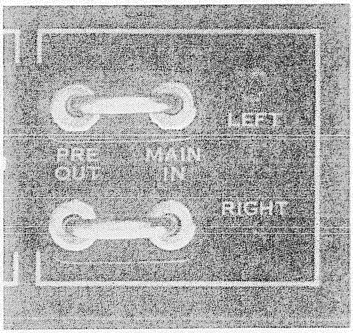
These are the U-shaped jumper connectors connecting the 'PRE OUT' (preamplifier output) jacks and the 'MAIN IN' (power amplifier input) jacks on the receiver's real panel, and can be easily pulled out. With these connectors unplugged, the preamplifier and power amplifier sections are separated and may be independently used. For example, a different power amplifier may be coupled to the 'PRE OUT' jacks.

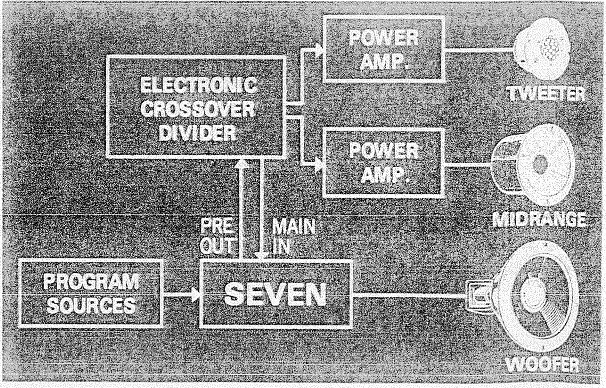
Separating the preamplifier and power amplifier sections makes it possible to upgrade your stereo system further by adopting the 'electronic crossover system,' among other things.

Note:

1. Be sure to leave the PM connectors firmly plugged in unless you want to separate the preamplifier and power amplifier sections for some purpose.

2. Turn off the Power Switch without failure before you plug in or out the PM connectors.


LEFT
PRE OUT
MAIN IN
RIGHT


ELECTRONIC CROSSOVER DIVIDER
POWER AMP.
TWEETER
POWER AMP.
MIDRANGE
PRE OUT
MAIN IN
PROGRAM SOURCES
SEVEN
WOOFER

SIMPLE MAINTENANCE HINTS/ACCESSORIES

Quick-Acting Fuses

The SEVEN's power transistors are protected by four quick-acting fuses. They are located on the rear panel of the receiver, concealed inside a plastics cover.

When a Function Indicator is glowing, if no or distorted sound comes out of one or both of the speaker systems, examine their connections and your operating procedure once. If nothing is wrong with them, it is possible that one or more of the quick-acting fuses have blown. Should this happen, disconnect the power cord from the wall AC outlet immediately, then remove the metal cover by loosening the two screws securing it to the rear panel, and check the four quick-acting fuses. If you find any of them blown, discover and eliminate the cause of the blowout, and replace it with a new 4-ampere quick-acting fuse supplied. Probable causes of the blowout include excessively large input signals and a short-circuit at the speaker terminals.

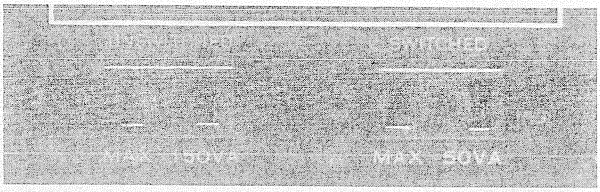
Should the Power Fuse Blow

If no Function Indicator should glow and the receiver simply remains dead even after you have turned on its Power Switch, it is possible that its power fuse has blown. If this happens, disconnect the power cord from the wall AC outlet at once and examine the power fuse on the receiver's rear panel. If you find it blown, replace it with a new glass-tubed fuse of the rated capacity (5-ampere for 100 to 127 volts, 3-ampere for 220 to 250 volts). Never use a fuse of a different capacity or a piece of wire, even as a stop-gap measure, or serious danger could result.

Rear-Panel AC Outlets

Of the two AC outlets provided on the rear-panel, the one marked 'SWITCHED' is controlled by the front-panel Power Switch. The other, marked 'UNSWITCHED,' is always 'live' and independent of the Power Switch. The voltage delivered at these outlets is the same as the power supply voltage used.

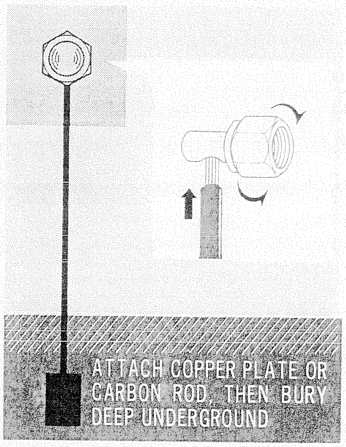
The 'SWITCHED' and 'UNSWITCHED' outlets have a power capacity of 50 VA and 150 VA, respectively. Before you connect any appliance to them, be sure that it is adjusted for use at the same power supply voltage, and that its power consumption is not beyond these figures.



Grounding

Any noise picked up by the connecting cables can be effectively grounded by connecting a piece of PVC (polyvinyl chloride) or enameled wire to the 'GND' terminal on the SEVEN's rear panel, attaching a small copper plate or carbon rod to the other end and burying it deep underground. The grounding leads of other equipment in your stereo system may be connected to the same terminal to ground the entire system at once.

If you have connected an external AM antenna to the receiver, it is advisable to ground it at the same time.


ATTACH COPPER PLATE OR CARBON ROD, THEN BURY DEEP UNDERGROUND

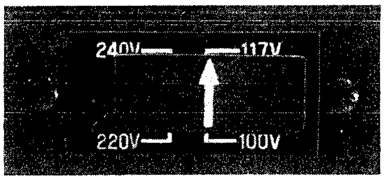
Voltage Adjustment

In order to permit the use of your SEVEN in any part of the world, it is equipped with a Voltage Selector. It is set to the correct power supply voltage of your area prior to shipment, so there is no need to touch it. However, should you move after purchasing the unit and find the power supply voltage is different, simply reset the selector as follows:

1. Remove the two screws securing the name plate on the unit's rear panel, then remove the name plate.

2. Unplug the Voltage Selector once, and reset it so that the arrow mark on it faces the correct voltage indication. Change the power fuse also whenever the power supply voltage has changed. For 100/117 volt operation, use a 5-ampere glass-tubed fuse. For 220/240 volt operation, use a 3-ampere one.

3. Where the power supply voltage considerably fluctuates, the Voltage Selector may be reset to avoid unpleasant side effects of such fluctuation. Reset it to the voltage immediately higher than the peak of the fluctuation.



About Servicing

If anything should ever go wrong with your SEVEN, or if you have any question about it, please contact the Sansui dealer from whom you purchased it or your nearest Authorized Sansui Service Station.

ACCESSORIES

1. FM Antenna	1
2. AM Antenna	1
3. Pin Plugs	2
4. Butterfly Bolts	2
5. Washers	2
6. Polishing Cloth	1
7. Quick-acting Fuses (4A)	2
8. Operating Instructions and Service Manual	1
9. Operating Instructions Sheet	1

GENERAL TROUBLESHOOTING CHART

If the receiver is otherwise operating satisfactory, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, turntable, tape deck, antenna and power cord.

2. Improper operation. Before operating any audio component, be sure to read its manufacture's instructions.

3. Improper location of audio components. The proper positioning of components, such as speakers and turutable, is essential to maximum stereo enjoyment.

4. Defective audio components.

The following are some other common causes of malfunction and what to do about them.

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
AM, FM or MPX reception.	A. Constant or intermittent noise heard at times or in certain area.	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor rectifier or oscillator. * Natural phenomena, such as atomospheric, static or thunderbolts. * Insufficient antenna input due to ferroconcrete wall or long distance from station.	* Attach noise limiter to electrical appliance producing noise, or attach it to receiver's power souce. * Install outdoor antenna and ground receiver to raise SN ratio. * Reverse power cord plug/receptacle connections. * If noise occurs at certain frequency, attach wave trap to input. * Keep receiver at proper distance from other electrical appliances.
AM reception.	A. Noise heard at particular time of day, in certain area or over part of dial.	* Peculiar to AM broadcasts.	* Install antenna for maximum antenna efficiency. See CONNECTIONS in operating instructions booklet. * In some cases, noise can be eliminated by grounding receiver or reversing power cord plug/receptacle connections.
	B. High-frequency noise.	* Adjacent-channel interference or beat interference. * TV set too close to stereo system.	* Such noise cannot be completely eliminated by receiver, but it is advisable to turn Treble control counterclockwise, or turn on High Filter. * Keep TV set at proper distance from stereo system.
FM reception.	A. Noisy.	* Poor nose limiter effect or too low SN ratio due to insufficient antenna input. Note: FM reception is affected considerably by transmission conditions of station, such as power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly.	* Install antenna (supplied) for maximum signal strength. * If this does not prove effective, use exclusive FM outdoor antenna. If using TV antenna for both TV and FM with divider, make sure TV reception is not affected. * Excessively long lead-in wire of antenna may cause noise.
	B. A series of pops.	* Ignition noise caused by starting of nearby automobile engine.	* Install antenna and its lead-in wire at proper distance from street or increase antenna input as descriced before.
	C. Tuning noise between stations.	* Results from nature of FM reception. * FM Muting Release switch depressed.	* Release FM Muting Release switch. * Ditto.

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM-MPX reception.	A. Noise heard during FM-MPX reception but inaudible during FM mono reception.	* Weaker signal because service area of FM-MPX broadcast is only half that of FM mono broadcast.	* Orient antenna for maximum antenna input. * Switch on High Filter and/or turn Treble control counterclockwise.
	B. Channel separation deteriorates during reception.	* Excess heat.	* Circulation of room air is important to receiver. Be sure that receiver is will ventilated.
	C. Stereo indicator blinks on and off.	* Interference.	* Indicator is not faulty, adjust VR_{402}.
Record playing or tape plaback.	A. Hum or howling.	* Turntable placed directly on speaker. * Wire other than shielded cable used. * Loose terminal contact. * Shielded cable too close to power cord, fluorescent lamp or other appliances. * Nearby amateur radio station or TV transmission antenna.	* Place cushion between turntable and speaker cabinet or place them away from each other. * Connecting shielded cables should be as short as possible. * Turn on Low Filter or turn Bass control counterclockwise. * Consult nearest Radio Regulatory Bureau.
	B. Surface noise.	* Worn or old record. * Worn phono stylus. * Phono stylus dusty. * Imploper stylus pressure.	* Recondition playback head of tape deck or replace turntable stylus. * Turn Treble control counterclockwise * Turn High Filter on.

SPECIFICATIONS

AUDIO SECTION

POWER OUTPUT
- IHF MUSIC POWER: 160W 4Ω at 1,000Hz
  120W 8Ω at 1,000Hz
- CONTINUOUS RMS POWER (each channel driven)
  60/60W 4Ω at 1,000Hz
  45/45W 8Ω at 1,000Hz
- CONTINUOUS RMS POWER (both channls driven)
  40+40W 8Ω at 1,000Hz
- CONTINUOUS RMS ROWER (both channels driven, 20 to 20,000Hz): 36+36W 8Ω load

TOTAL HARMONIC DISTORTION
- POWER AMPLIFIER ONLY:
  less than 0.3% at rated output
- PRE-AMP ONLY (PHONO to Pre output):
  less than 0.2% at rated output
- PRE-AMP ONLY (AUX to Pre output):
  less than 0.1% at rated output
- OVER-ALL (AUX to Power output):
  less than 0.3% rated output

INTERMODULATION DISTORTION (70Hz: 7,000Hz=4:1 SMPTE METHOD)
- POWER AMPLIFIER ONLY:
  less than 0.3% at rated output
- OVER-ALL (AUX to Power output):
  less than 0.3% at rated output

POWER BANDWIDTH (IHF): 10 to 35,000Hz at 8Ω load

FREQUENCY RESPONSE: at 1 watt
- OVER-ALL (AUX to Power output):
  15 to 40,000Hz +1dB, −1.5dB
- POWER AMPLIFIER ONLY:
  15 to 40,000Hz +1db, −1.0dB
- DEVIATION FROM RIAA: +1dB, −1dB (30 to 15,000Hz)

LOAD IMPEDANCE: 4 to 16Ω

DAMPING FACTOR: approximately 50 at 8Ω load

CHANNEL SEPARATION (at rated output 1,000Hz)
- POWER AMPLIFIER ONLY: 60dB
- OVER-ALL (from PHONO): 50dB
- OVER-ALL (IHF) 50dB

HUM AND NOISE (IHF)
- OVER-ALL (from PHONO): 70dB
- OVER-ALL (from AUX): 80dB
- POWER AMPLIFIER ONLY: 90dB

INPUT SENSITIVITY AND IMPEDANCE (at rated output 1,000Hz)
- PHONO: 2.5mV (50kΩ)
  - MAX. INPUT CAPACITY:
    100mV at 0.5% distortion
- AUX: 150mV (50kΩ)
- TAPE MONITOR: 150mV (50kΩ)
- N.R. ADAPTOR: 150mV (50kΩ)
- 4-CH ADAPTOR: 150mV (50kΩ)
- POWER AMPLIFIER INPUT: 800mV (50kΩ)

OUTPUT LEVEL:
- TEPE MONITOR (DIN): 30mV
  - PHONE TYPE, PIN: 150mV
- PREAMPLIFIER: 800mV
  - MAX: 4,000mV (at 0.5% distortion)

TONE CONTROLS
- BASS: +15dB, −15dB at 20Hz (3dB step)
- MIDANGE: +5dB, −5dB at 15,00Hz (1dB step)
- TREBLE: +15dB, −15dB at 20,000Hz(3dB step)

FILTERS
- LOW: −10dB at 50Hz (12dB/oct.)
- HIGH: −10dB at 10,000Hz(12dB/oct.)

LOUDNESS: +10dB at 50Hz, +8dB at 10,000Hz

TUNER SECTION

FM:

TUNING RANGE: 88 to 108MHz

SENSITIVITY (IHF): 1.8μV

SIGNAL TO NOISE RATIO: better than 63dB

IMAGE FREQUENCY REJECTION:
better than 80dB at 98MHz

SPURIOUS RESPONSE REJECTION:
better than 100dB

SELECTIVITY: better than 60dB

IF REJECTION: better than 100dB

CAPTURE RATIO: better than 1.5dB

SPURIOUS RADIATION: less than 34dB

TOTAL HARMONIC DISTORTION
- MONO: less than 0.3%
- STEREO: less than 0.5%

STEREO SEPARATION: better than 40dB at 400Hz

FREQUENCY RESPONSE: 30 to 12,000Hz +1dB, −2dB

ANTENNA INPUT IMPEDANCE:
300Ω balanced, 75Ω unbalanced

AM:

TUNING RANGE: 535 to 1,605kHz

SENSITIVITY (Bar Antenna): 46dB/m

SELECTIVITY (±10kHz): better than 30dB

IMAGE FREQUENCY REJECTION:
better than 100dB/m at 1,000kHz

IF RIJECTION: better than 100dB/m at 1,000kHz

SEMICONDUCTORS:
74 Transistors, 42 Diodes, 4 Zener Diodes, 1 IC

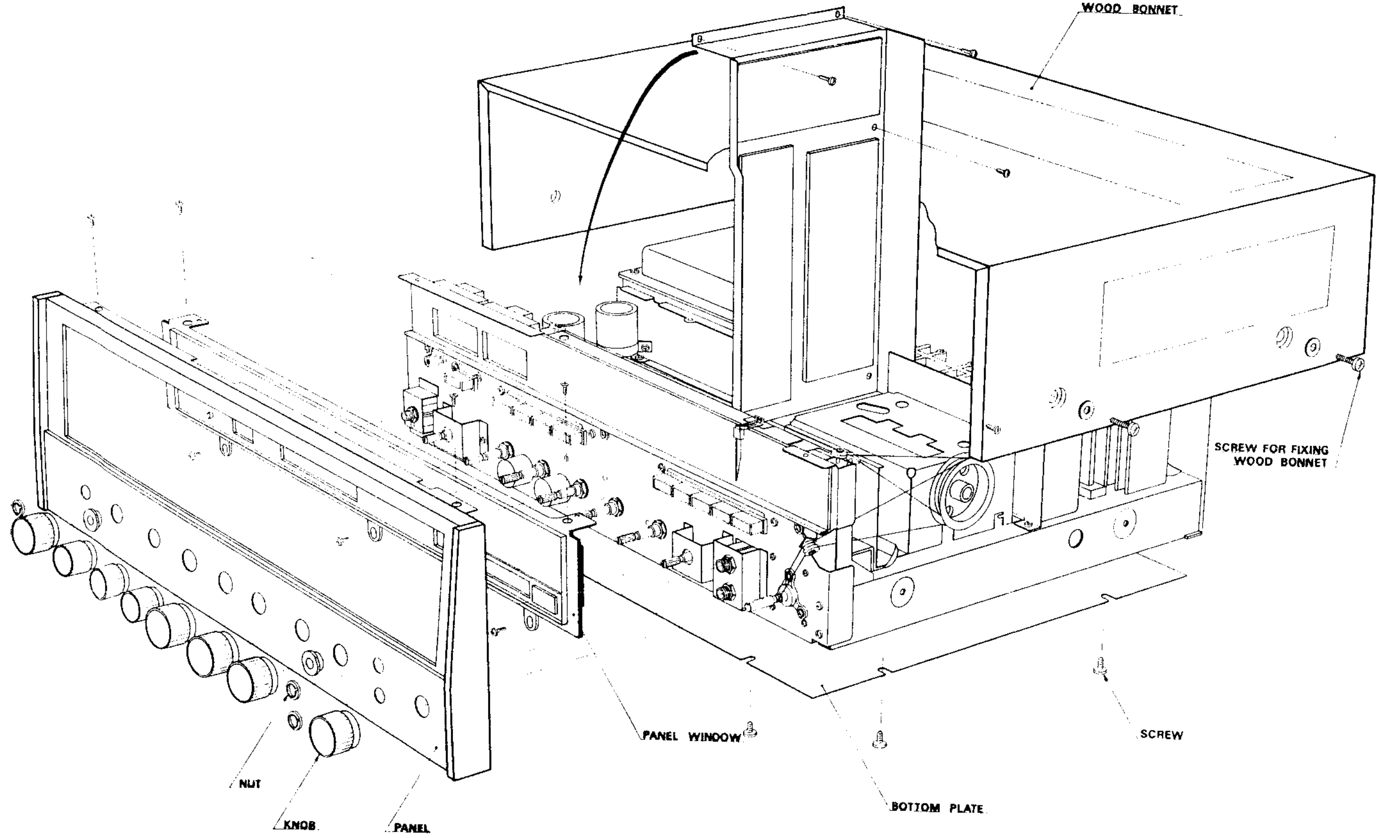
POWER REQUIREMENTS
- POWER VOLTAGE: 100, 117, 220, 240V 50/60Hz
- POWER CONSUMPTION: Max. 310VA 240W
  Rated 130VA 102W

DIMENSIONS: 440mm, 17-3/8″W.
140mm, 5-9/16″H.
328mm, 13″D.

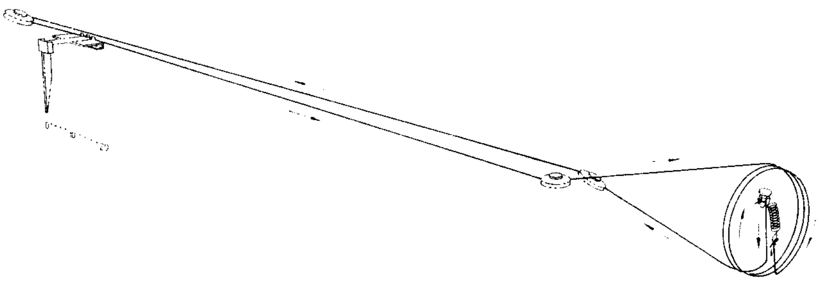
WEIGHT: 14.3kg (31.5 lbs.)

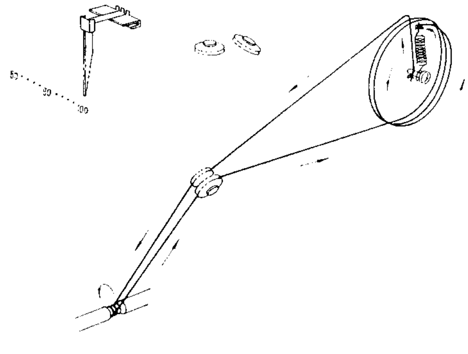
DISASSEMBLY PROCEDURE

REMOVING FRONT PANEL, WOOD BONNET AND BOTTOM BOARD

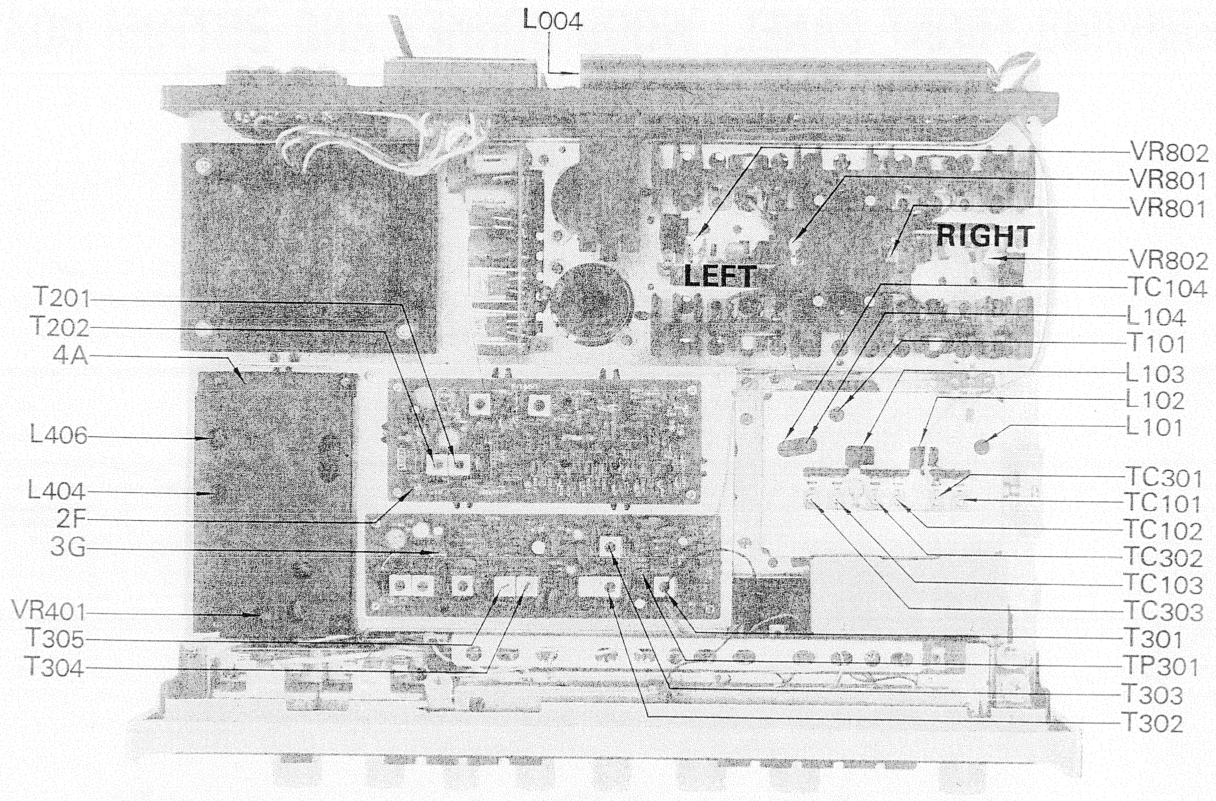

WOOD BONNET
SCREW FOR FIXING WOOD BONNET
PANEL WINDOW
SCREW
BOTTOM PLATE
NUT
KNOB
PANEL

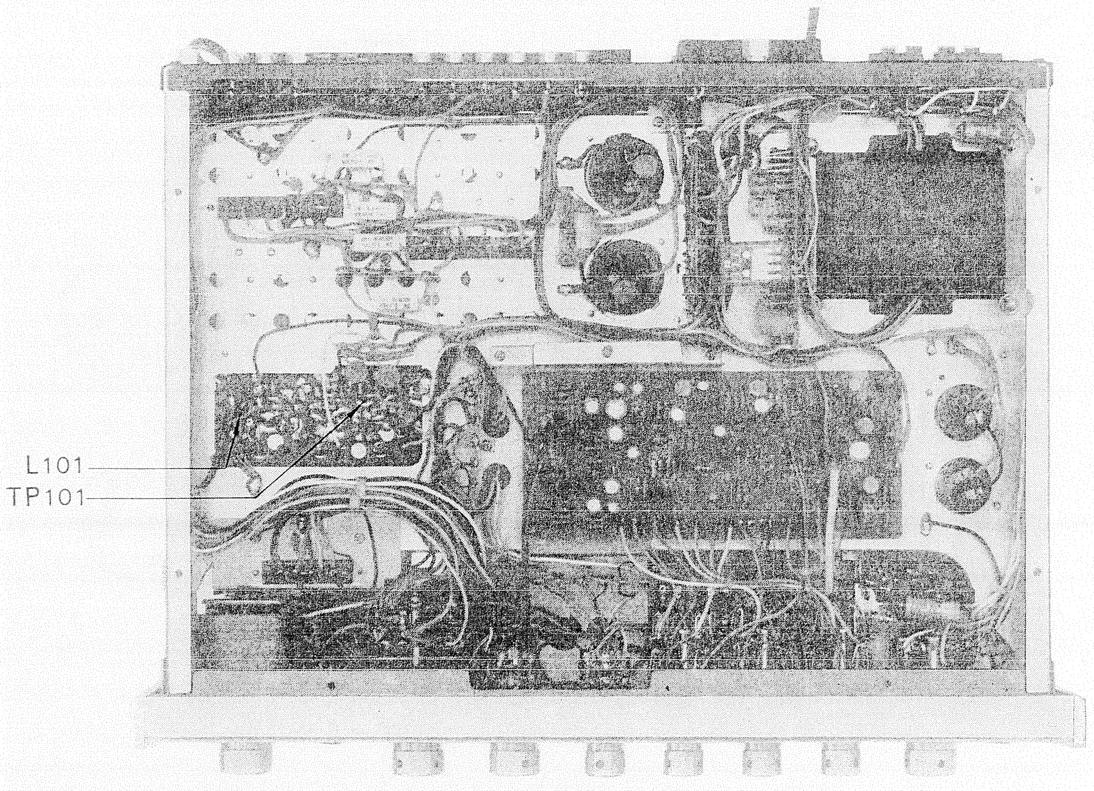
DIAL MECHANISM



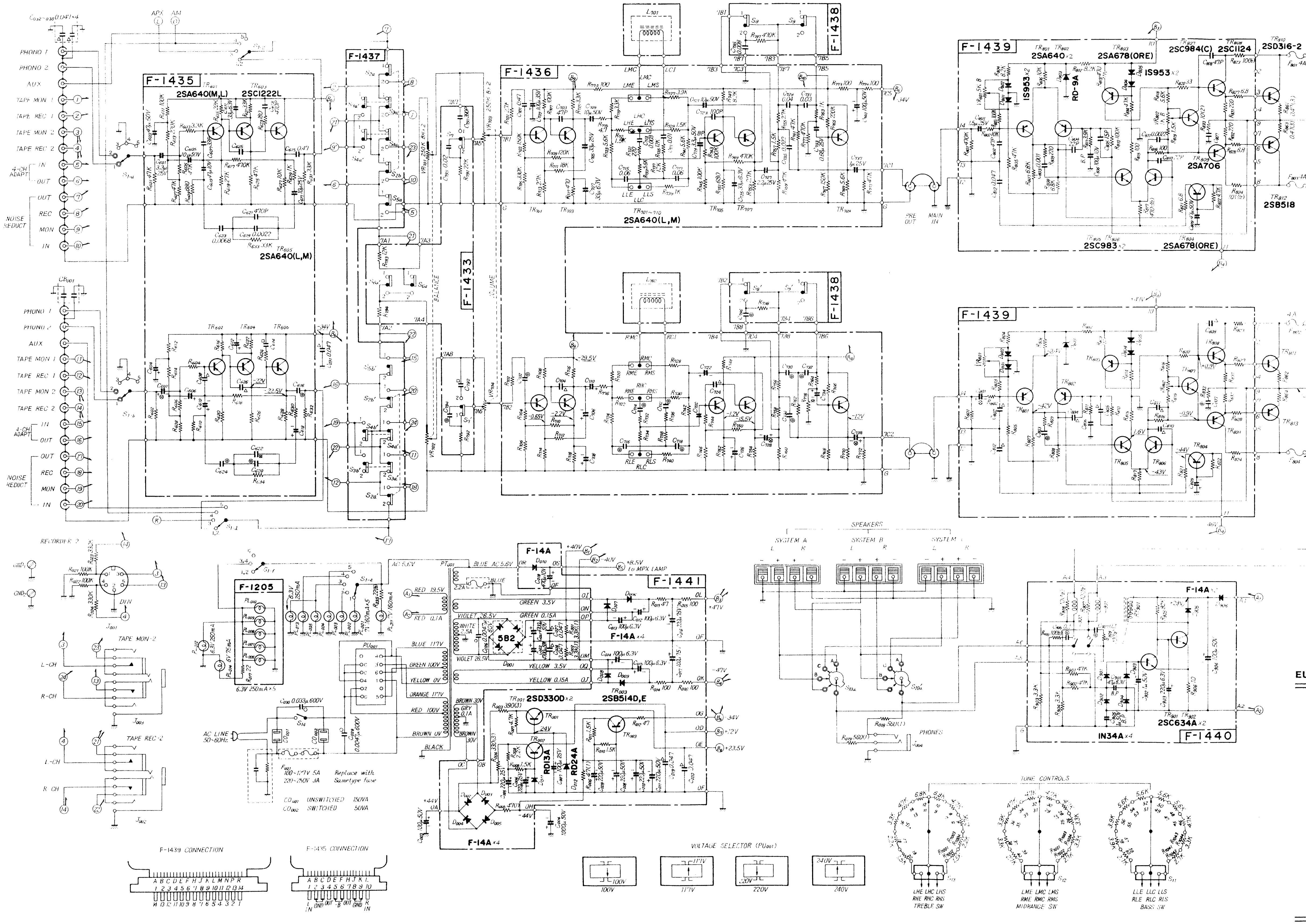


TEST POINTS

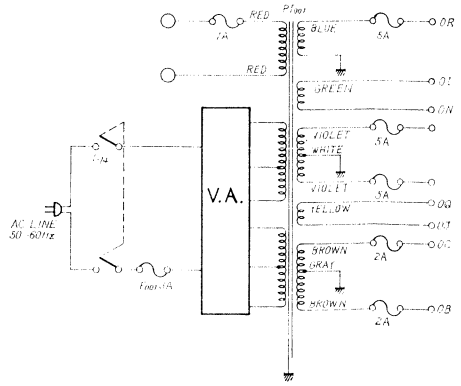

L004
T201
T202
4A
L406
L404
2F
3G
VR401
T305
T304
LEFT
RIGHT
VR802
VR801
VR801
VR802
TC104
L104
T101
L103
L102
L101
TC301
TC101
TC102
TC302
TC103
TC303
T301
TP301
T303
T302


L101
TP101

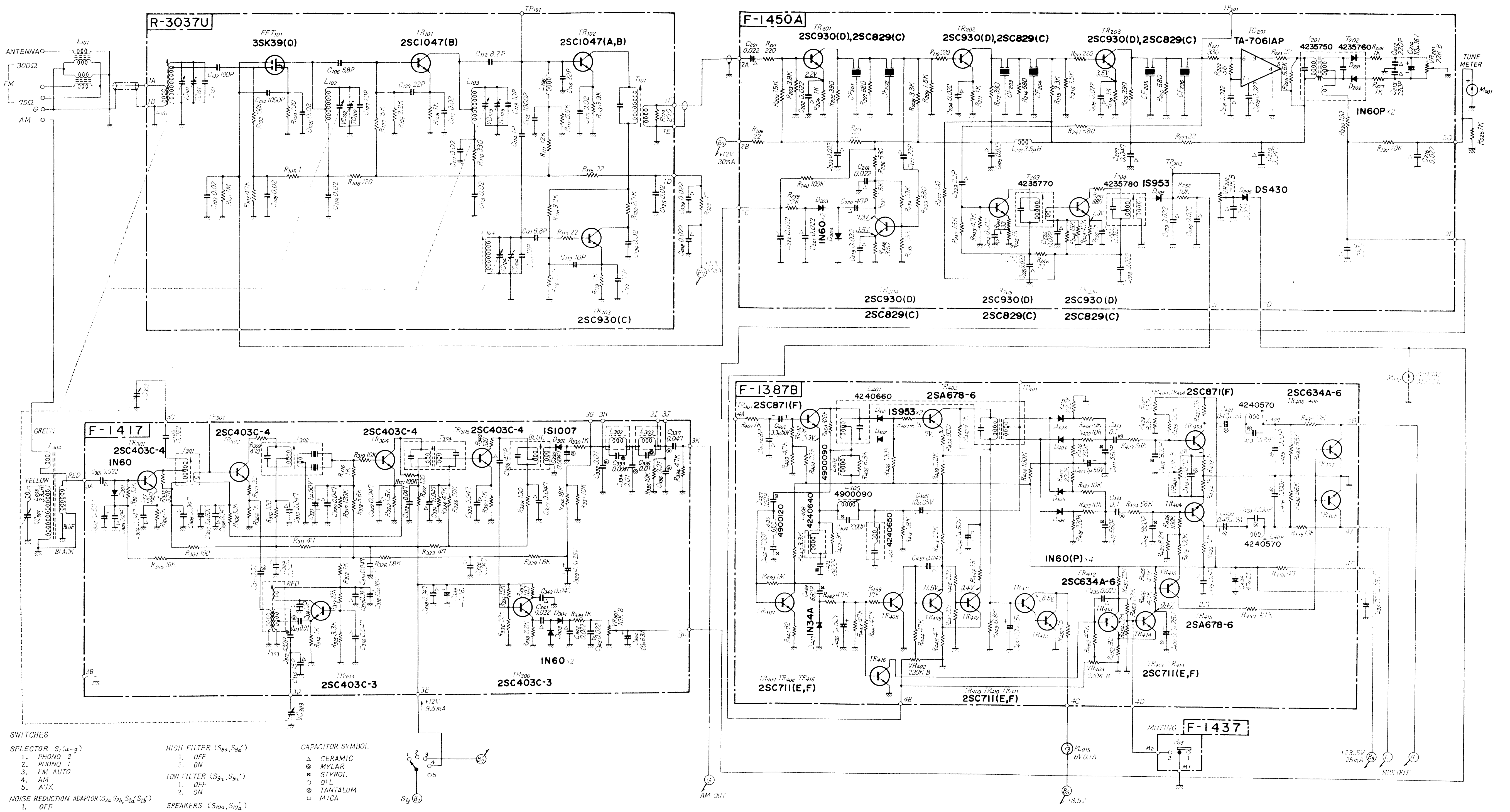
SCHEMATIC DIAGRAM OF AMPLIFIER SECTION


PHONO 1
PHONO 2
AUX
TAPE MON 1
TAPE REC 1
TAPE MON 2
TAPE REC 2
4-CH ADAPT IN
OUT
NOISE REDUCT OUT
REC
MON
IN
APX AM
F-1435
2SA640(M,L)
2SC1222L
2SA640(L,M)
F-1437
F-1433
BALANCE
VOLUME
F-1436
2SA640(L,M)
F-1438
L701
F-1439
2SA640×2
2SA678(ORE)
2SC984(C)
2SC1124
2SD316-2
1S953×2
RD-9A
1S953×2
2SA706
2SB518
2SC983×2
2SA678(ORE)
PRE OUT
MAIN IN
SPEAKERS
SYSTEM A
SYSTEM B
SYSTEM C
PHONES
RECORDER 2
DIN
TAPE MON-2
TAPE REC-2
L-CH
R-CH
F-1205
6.3V 250mA×5
AC LINE 50~60Hz
Replace with Same type fuse
CO001 UNSWITCHED 150VA
CO002 SWITCHED 50VA
F-14A
+8.5V to MPX LAMP
F-1441
F-14A×4
5B2
2SD330D×2
2SB514D,E
RD13A
RD24A
F-14A×4
BLUE AC 5.6V
RED 19.5V
RED 0.1A
GREEN 3.5V
GREEN 0.15A
VIOLET 26.5V
WHITE 1.5A
YELLOW 3.5V
YELLOW 0.15A
BLUE 117V
GREEN 100V
YELLOW 0V
ORANGE 117V
RED 100V
BROWN 0V
BLACK
BROWN 30V
GRY 0.1A
PU001
+44V
-44V
+34V
+12V
+23.5V
-47V
F-1440
F-14A×2
2SC634A×2
IN34A×4
TONE CONTROLS
LHE LHC LHS RHE RHC RHS TREBLE SW
LME LMC LMS RME RMC RMS MIDRANGE SW
LLE LLC LLS RLE RLC RLS BASS SW
VOLTAGE SELECTOR (PU001)
100V
117V
220V
240V
F-1439 CONNECTION
A B C D E F H J K L M N P R
1 2 3 4 5 6 7 8 9 10 11 12 13 14
F-1435 CONNECTION
A B C D E F H J K L
1 2 3 4 5 6 7 8 9 10

EU Type Connection of the AC Supply Circuit.


RED
PT001
1A
BLUE
5A
0R
RED
GREEN
0I
0N
VIOLET
5A
WHITE
VIOLET
5A
YELLOW
0Q
0J
BROWN
2A
0C
GRAY
BROWN
2A
0B
V.A.
AC LINE 50·60Hz
F001 3A

SCHEMATIC DIAGRAM OF TUNER SECTION



ANTENNA
300Ω
FM
75Ω
G
AM
R-3037U
FET101 3SK39(Q)
TR101 2SC1047(B)
TR102 2SC1047(A,B)
TR103 2SC930(C)
F-1450A
TR201 2SC930(D),2SC829(C)
TR202 2SC930(D),2SC829(C)
TR203 2SC930(D),2SC829(C)
IC201 TA-7061AP
T201 4235750
T202 4235760
IN60P
TUNE METER
M401
T203 4235770
T204 4235780
IS953
DS430
IN60
2SC930(D)
2SC829(C)
+12V 30mA
F-1417
TR301 2SC403C-4
IN60
2SC403C-4
TR304 2SC403C-4
TR305 2SC403C-4
IS1007
GREEN
RED
YELLOW
BLUE
BLACK
TR303 2SC403C-3
TR306 2SC403C-3
IN60
+12V 9.5mA
AM OUT
F-1387B
TR401 2SC871(F)
L401 4240660
TR402 2SA678-6
IS953
2SC871(F)
2SC634A-6
4240570
4900090
4900120
4240640
4240650
4900090
IN60(P)
IN34A
2SC634A-6
2SA678-6
2SC711(E,F)
2SC711(E,F)
2SC711(E,F)
VR402 220K B
VR403 220K B
PL405 6V 0.1A
+8.5V
MUTING F-1437
+23.5V 25mA
MPX OUT
S1g

SWITCHES

SELECTOR $S_1(a\sim g)$
1. PHONO 2
2. PHONO 1
3. FM AUTO
4. AM
5. AUX

NOISE REDUCTION ADAPTOR ($S_{2a}\,S_{2b}, S_{2a}'\,S_{2b}'$)
1. OFF
2. ON

TAPE MONITOR 1 ($S_{3a}\,S_{3b}, S_{3a}'\,S_{3b}'$)
1. OFF
2. ON

TAPE MONITOR 2 ($S_{4a}\,S_{4b}, S_{4a}'\,S_{4b}'$)
1. OFF
2. ON

4CH ADAPTOR (S_{5a}, S_{5a}')
1. OFF
2. ON

MONO (S_{6a}, S_{6a}')
1. STEREO
2. MONO

LOUDNESS (S_{7a}, S_{7a}')
1 OFF
2 ON

HIGH FILTER (S_{8a}, S_{8a}')
1. OFF
2. ON

LOW FILTER (S_{9a}, S_{9a}')
1. OFF
2. ON

SPEAKERS (S_{10a}, S_{10a}')
1. OFF
2. A
3. B
4. C
5. A+B
6. A+C

BASS SW (S_{11a}, S_{11a}')
MIDRANGE SW (S_{12a}, S_{12a}')
TREBLE SW (S_{13a}, S_{13a}')
POWER SW (S_{14})
FM MUTING (S_{15})
1. ON
2. OFF

CAPACITOR SYMBOL
△ CERAMIC
◎ MYLAR
▣ STYROL
○ OIL
⊗ TANTALUM
□ MICA

ALL RESISTORS ARE ¼WATT UNLESS OTHER WISE NOTED

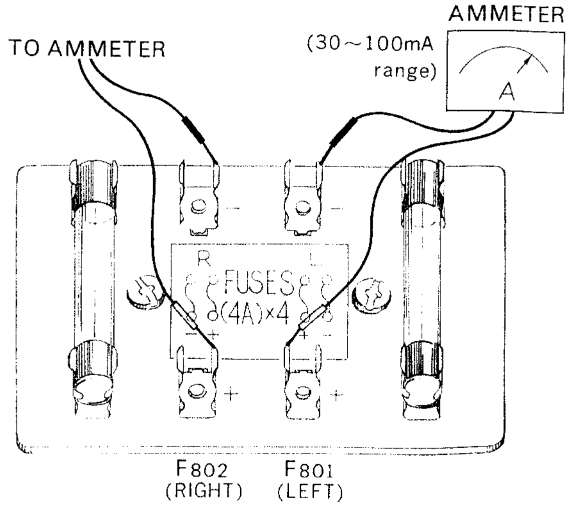
ALIGNMENT

OUTPUT BALANCE ALIGNMENT OF POWER AMPLIFIER

STEP	CONNECT/ADJUST	REMARKS
1.	Connect 8-ohm (or 16-ohm) resistor (minimum rating of 50 watts) to SYSTEM-A left-channel speaker terminal.	
2.	Connect voltmeter to same speaker terminal.	Use voltmeter with 0.1-1V range.
3.	Set Speaker Seletor to SYSTEM-A position.	
4.	Adjust VR_{801} (left channel) so that voltage will be kept within 0±50mV.	
5.	For right channel, repeat above procedure, but adjust VR_{801} (right channel) in step 4.	

CURRENT ALIGNMENT OF POWER AMPLIFIER

STEP	CONNECT/ADJUST	REMARKS
1.	Remove F_{801} and F_{802}.	Refer to "About the Quick-Acting Fuses" (page13).
2.	Turn VR_{802} (left and right cnannels)fully counterclockwise.	
3.	Tun on receiver.	
4.	Connect ammeter (tester) where F_{801} was (refer to illustration below).	Be sure power is turned on before connecting ammenter. Set ammeter to its 30~100mA range.
5.	Turn VR_{802} (left channel) slowly clockwise until ammeter shows 15±3mA.	
6.	Turn off power, then replace F_{801}.	
7.	Turn on power again.	
8.	Now, connect ammeter where F_{802} was (refer to illustration below).	
9.	Turn VR_{802} (right channel) slowly clockwise until ammeter shows 15±3mA.	
10.	Turn off power, then replace F_{802}.	



ALIGNMENT

FM ALIGNMENT PROCEDURE

NOTE: Set FM signal generator level to minimum first.

Equipment required: 1. Sweep Generator 2. Oscilloscope 3. FM Signal Generatar 4. Multiplex Stereo Generator 5. AC V.T.V.M.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL TO SET	ADJUST	ADJUST FOR
1	Discriminator.	Sweep generator 10.7MHz ±200kHz.	To TP$_{101}$ via 10pF ceramic capacitor.	Oscilloscope connected to 2F.		FM Discriminator transformer T$_{201}$ primary and secondary.	S curve.
2.	O.S.C.	FM signal generator 88MHz 400Hz 100% modulation.	To antenna terminals.	Oscilloscope and V.T.V.M. at output load.	88MHz.	O.S.C. coil L$_{104}$.	Maximum.
3.	O.S.C.	FM signal generator 108MHz 400Hz 100% modulation.	Same as above.	Same as above.	108MHz.	O.S.C. trimmer TC$_{104}$.	Maximum.
4	Repeat 2 and 3.						
5	RF Amp. Circuit.	FM signal generator 90MHz 400Hz 100% modulation.	Same as above.	Same as above.	90MHz.	Antenna coil L$_{101}$, L$_{102}$ and L$_{103}$.	Maximum.
6.	RF Amp. Circuit.	FM signal generator 106MHz 400Hz 100% modulation.	Same as above.	Same as above.	106MHz.	Trimmer TC$_{101}$, TC$_{102}$ and TC$_{103}$.	Maximum.
7	Repeat 5 and 6.						

FM MULTIPLEX ALIGNMENT PROCEDURE

Do not attemt to align Multiplex Circuit unless following equipment is available:
1. Multiplex Stereo Generator 2. Oscilloscope 3. AC V.T.V.M. 4. Low Frequency Oscillator 5. FM Signal Generator

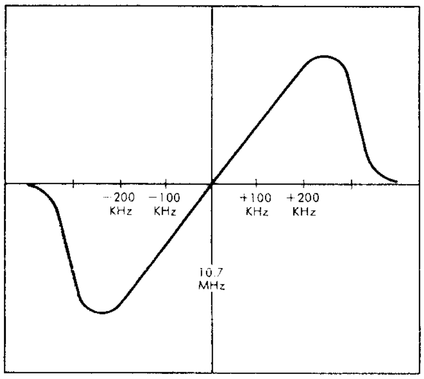
STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	AUJUST	ADJUST FOR
1.	Separation VR.				VR$_{401}$.	Fully counter-clockwise.
2.	67kHz Coil.	Low frequency oscillator 67kHz.	4A.	V.T.V.M. and Oscilloscope at TP$_{401}$.	L$_{404}$.	Minimum.
3.	Stereo separation 19kHz Coil.	FM signal generator 98MHz 100% modulation Stereo signal generator —composite signal with pilot signal, left channel, 40% modulation.	Antenna terminals Tune to signal.	V.T.V.M. and oscilloscope at right channel output load.	L$_{406}$.	Channel-R minimum.
4.	Stereo separation VR.	Same as above.	Same as above.	Same as above.	VR$_{401}$.	Same as above.

AM ALIGNMENT PROCEDURE

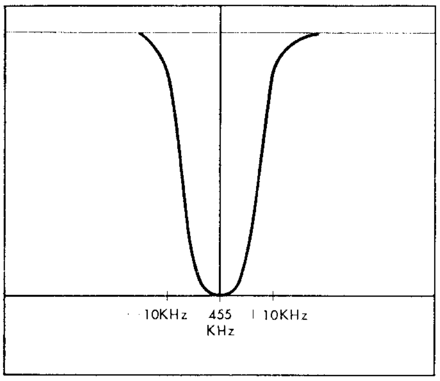
NOTE: To align, set AM signal generator level to minimum.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Transformer.	455kHz ±30kHz Sweep-generator.	TP_{301}.	Oscilloscope and V.T.V.M. at 3G.		I.F.T. T_{302}, T_{304} and T_{305}.	Best IF wave form.
2.	O.S.C.	AM-generator 535kHz 400Hz 30% Modulation.	Antenna terminals.	Oscilloscope and V.T.V.M. at output load.	535kHz.	O.S.C. coil T_{303}.	Maximum.
3.	O.S.C.	AM-generator 1600kHz 400Hz 30% Modulation.	Same as above.	Same as above.	1600kHz.	O.S.C. trimmer cap. TC_{303}.	Maximum.
4.	Repeat 2 and 3.						
5.	RF amp.	AM-generator 600kHz 400Hz 30% Moduration.	Same as above.	Same as above.	600kHz.	RF transformer T_{301}.	Maximum.
6.	Antenna circuit.	Same as above.	Same as above.	Same as above.	600kHz.	Ferrite bar antenna coil L_{004}.	Maximum.
7.	RF amp.	AM-generator 1400kHz 400Hz 30% Modulation.	Same as above.	Same as above.	1400kHz.	RF trimmer TC_{302}.	Maximum.
8.	Antenna circuit.	Same as above.	Same as above.	Same as above.	1400kHz.	Antenna circuit trimmer TC_{301}.	Maximum.
9.	Repeat 5, 6, 7, 8.						

FM DISCRIMINATOR WAVE FORM



AM IF WAVE FORM



PRINTED CIRCUIT BOARDS AND PARTS LIST

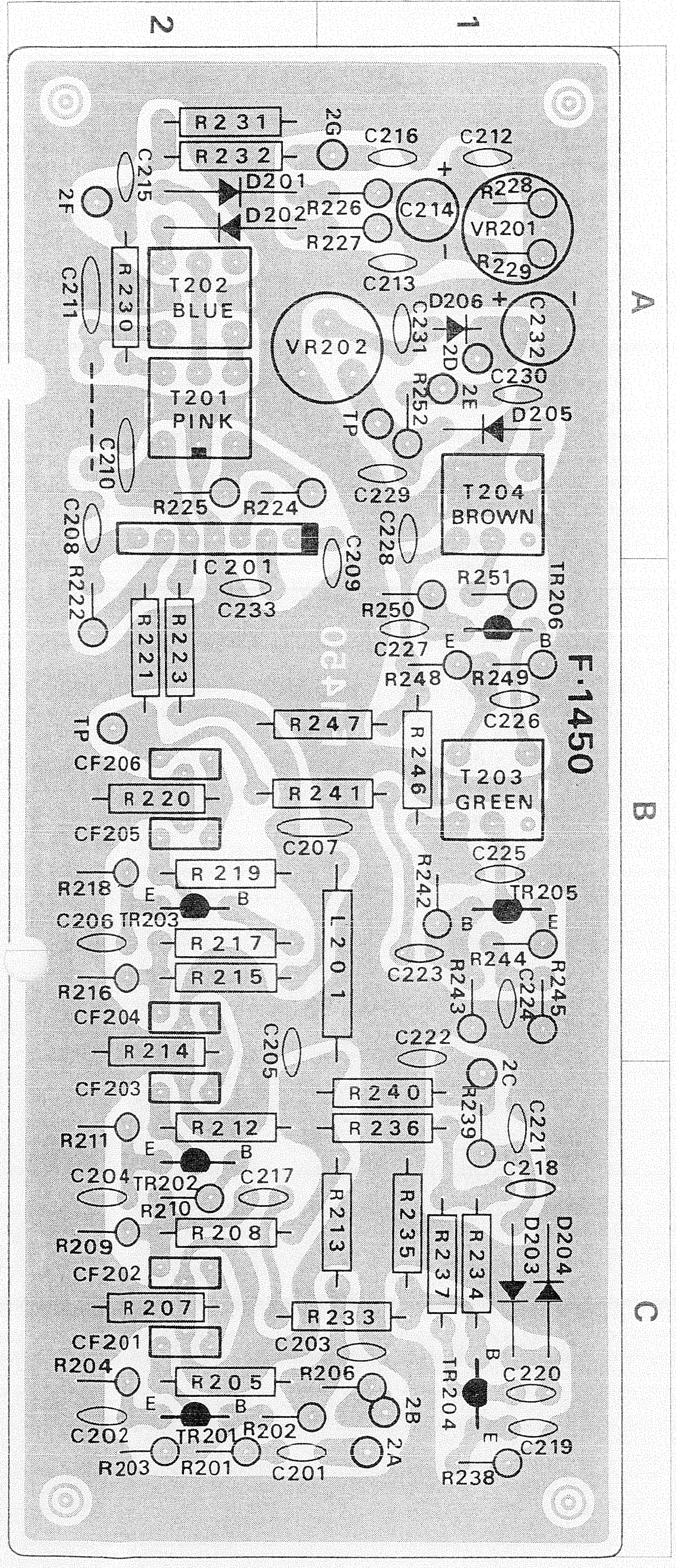
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

FM IF BLOCK ⟨F-1450A⟩

Stock No. 7520540

W	X		Y	Z
R201	220Ω	±10% ¼W CR.	0100221	2C
R202	15kΩ		0100153	2C
R203	3.9kΩ		0100392	2C
R204	1kΩ		0100102	2C
R205	390Ω		0101391	2C
R206	10Ω		0100100	1C
R207	680Ω		0101681	2C
R208	3.3kΩ		0101332	2C
R209	1.5kΩ		0100152	2C
R210	220Ω		0100221	2C
R211	1kΩ		0100102	2C
R212	390Ω		0101391	2C
R213	22Ω		0101220	1C
R214	680Ω		0101681	2B
R215	3.3kΩ		0101332	2B
R216	1.5kΩ		0100152	2B
R217	220Ω		0101221	2B
R218	1kΩ		0100102	2B
R219	390Ω		0101391	2B
R220	680Ω		0101681	2B
R221	330Ω		0101331	2B
R222	56Ω		0100560	2B
R223	22Ω		0101220	2B
R224	22Ω		0100220	2A
R225	5.6kΩ		0100562	2A
R226	1kΩ		0100102	1A
R227	1kΩ		0100102	1A
R230	100Ω		0101101	2A
R232	10kΩ		0101103	2A
R233	680Ω		0101681	1, 2C
R234	10kΩ		0101103	1C
R235	1.5kΩ		0101152	1C
R236	100Ω		0101101	1C
R237	1.5kΩ		0101152	1C
R238	330Ω		0100331	1C
R239	22kΩ		0100223	1C
R240	100kΩ		0101104	1C
R241	1.5kΩ		0101152	1, 2B
R242	15kΩ		0100153	1B
R243	4.7kΩ		0100472	1B
R244	100Ω		0100101	1B
R245	1kΩ		0100102	1B
R246	22Ω		0101220	1B
R247	100Ω		0101101	1, 2B
R248	15kΩ		0100153	1B
R249	4.7kΩ		0100472	1B
R250	1kΩ		0100102	1B
R251	680Ω		0100681	1B
R252	10kΩ		0100103	1A
VR201	22kΩ (B)	FM Tuning Meter Adj.	1035150	1A
VR202		FM Signal Meter Adj.	1035150	1, 2A

W	X		Y	Z
C201	0.022μF	$^{+80}_{-20}\%$ 50 V CC.	0657223	1, 2C
C202	0.022μF		0657223	2C
C203	0.022μF		0657223	1C
C204	0.022μF		0657223	2C
C205	0.022μF		0657223	2B, C
C206	0.022μF		0657223	2B
C207	0.047μF		0657473	1, 2B
C208	0.022μF		0657223	2B
C209	0.022μF		0657223	1A, B
C210	0.047μF		0657473	2A
C212	220pF	±10% 50 V CC.	0660221	1A
C213	220pF		0660221	1A
C214	10μF	16 V EC.	0512100	1A
C215	220pF	±10% 50 V CC.	0660221	2A
C216	0.022μF	$^{+80}_{-20}\%$ 50 V CC.	0657223	1A
C217	22pF	±10% 50 V CC.	0660220	2C
C218	0.022μF	$^{+80}_{-20}\%$ 50 V CC.	0657223	1C
C219	0.022μF		0657223	1C
C220	47pF	±10% 50 V CC.	0660470	1C
C221	0.022μF	$^{+80}_{-20}\%$ 50 V CC.	0657223	1C
C222	0.022μF		0657223	1B
C223	22pF	±10% 50 V CC.	0660220	1B
C224	0.022μF	$^{+80}_{-20}\%$ 50 V CC.	0657223	1B
C225	0.022μF		0657223	1B
C226	0.022μF		0657223	1B
C227	0.022μF		0657223	1B
C228	0.022μF		0657223	1A, B
C229	0.022μF		0657223	1A
C230	0.022μF		0657223	1A
C231	0.022μF		0657223	1A
C233	0.022μF		0657223	2B
TR201	2SC930(D) or 2SC829(C)		0305791 or 0305461	2C
TR202				2C
TR203				2B
TR204				1C
TR205				1B
TR206				1B
D201	IN60P		0311060	2A
D202			0311060	2A
D203	IN60		0310331	1C
D204			0310331	1C
D205	IS953		0311050	1A
D206	DS-430		0340090	1A
IC201	TA-7061AP		0360060	2B
CF201	SFA-10.7MC		0910100	2C
CF202			0910100	2C
CF203			0910100	2C
CF204			0910100	2B
CF205			0910100	2B
CF206			0910100	2B
T201	FM IFT		4235750	2A
T202			4235760	2A
T203			4235770	1B
T204			4235780	1A
L201	3.5μH Choke Coil		4290011	1B
	F-1450 Printed Circuit Board		2520320	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C214
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VR201
R229
C211
R230
T202 BLUE
C213
VR202
D206
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R252
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C230
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T201 PINK
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C229
T204 BROWN
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IC201
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C233
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CF206
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CF201
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R204
R205
R206
C220
TR204
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C202
TR201
R202
2A
C219
R203
R201
C201
R238

Abbreviations

CR : Carbon Resistor
CeR : Cement Resistor
MFR : Metal Oxide Film Resistor
AEC : Aluminum Solid Electrolytic Capacitor
CC : Ceramic Capacitor
BpEC: Bi-Polur Electrolytic Capacitor
EC : Electrolytic Capacitor
MC : Mylar Capacitor
SC : Styrol Capacitor

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

FM MPX BLOCK 〈F-1387B〉

StockNo. 7540670

W	X		Y	Z
R401	1kΩ	±10% ¼W CR.	0100102	1 C
R402	100kΩ		0100104	1 C
R403	4.7kΩ		0100472	1 C
R404	22kΩ		0100223	1 C
R405	6.8kΩ		0100682	1 C
R406	100kΩ		0100104	1 B , C
R407	4.7kΩ		0100472	1 B
R408	820Ω		0100821	2 B
R409	2.2kΩ		0100222	2 B , C
R410	47kΩ		0100473	1 B
R412	1.8kΩ		0100182	1 B
R413	22kΩ		0100223	2 B , C
R414	100kΩ		0100104	2 B
R415	220kΩ		0100224	1 A , B
R416	220kΩ		0100224	1 A , B
R417	220kΩ		0100224	1 A , B
R418	220kΩ		0100224	1 B
R419	10kΩ		0100103	1 A
R420	10kΩ		0100103	1 A
R421	10kΩ		0100103	1 A
R422	10kΩ		0100103	1 A
R423	56kΩ		0100563	1 A
R424	56kΩ		0100563	1 A
R425	100kΩ		0100104	1 A
R426	100kΩ		0100104	1 A
R427	100kΩ		0100104	1 A
R428	100kΩ		0100104	1 A
R429	8.2kΩ		0100822	1 A
R430	8.2kΩ		0100822	1 A
R431	10kΩ		0100103	1 A
R432	10kΩ		0100103	1 A
R433	1kΩ		0100102	2 A
R434	1kΩ		0100102	1 A
R435	56kΩ		0100563	2 A
R436	56kΩ		0100563	2 A
R437	10kΩ		0100103	2 A
R438	10kΩ		0100103	2 A
R439	1MΩ		0100105	2 C
R440	3.3kΩ		0100332	2 B , C
R441	82Ω		0100820	2 C
R442	4.7kΩ		0100472	2 C
R443	47kΩ		0100473	2 C
R444	47kΩ		0100473	2 C
R445	47Ω		0100470	2 C
R446	22kΩ		0100223	2 C
R447	22kΩ		0100223	2 C
R448	1kΩ		0100102	2 C
R449	6.8kΩ		0100682	1, 2 B
R450	15Ω		0100150	2 B
R451	22kΩ		0100223	2 B
R452	120Ω		0100121	2 B
R453	22kΩ		0100223	2 B
R454	22kΩ		0100223	2 B
R455	47kΩ		0100473	2 B
R456	4.7kΩ		0100472	2 B
R457	4.7kΩ	±10% ¼W CR.	0101472	2 A
R458	47Ω		0100470	2 B
R459	47kΩ		0100473	2 B
R460	47kΩ		0100473	2 C
R461	47kΩ		0100473	2 C
R462	39kΩ		0100393	1 C
VR401	10kΩ (B) Stereo Separation Adj.		1035130	1 A
VR402	220kΩ (B) Stereo Indicator Adj.		1035210	2 C
VR403	220kΩ (B) FM Muting Adj.		1035210	2 B , C
C401	68pF	±10% 50 V CC.	0660680	1 C
C402	3.3μF	50 V EC.	0515339	1 C
C403	6800pF	±5% 50 V SC.	0629001	1 C
C404	2200pF		0620222	2 B
C405	10μF	25 V EC.	0513100	1 B
C406	1μF	50 V EC.	0515109	2 B
C411	560pF	± 5 % 50 V SC.	0620561	1 A
C412	560pF		0620561	1 A
C413	0.1μF	±10% 50 V MC.	0601108	1 A
C414	0.1μF		0601108	1 A
C415	1800pF	±5% 50 V SC.	0620182	1 A
C416	1800pF		0620182	1 A
C417	1μF	50 V EC.	0515109	1, 2 B
C418	0.0022μF	±10% 50 V MC.	0601226	2 A
C419	0.47μF	25 V AEC.	0563478	2 A
C420	0.47μF		0563478	1, 2 A
C423	1200pF	±5% 50 V SC.	0620122	2 A
C424	1200pF		0620122	2 A
C425	0.001μF	±10% 50 V MC.	0601106	2 A, B
C426	0.001μF		0601106	2 A
C427	100pF	±5% 50 V SC.	0620101	1 C
C428	4700pF		0620472	2 C
C429	680pF		0620681	2 C
C430	1μF	50 V EC.	0515109	2 C
C431	10μF	25 V EC.	0513100	2 B
C432	0.1μF	25 V AEC.	0563108	2 B
C433	0.047μF	$^{+80}_{-20}$% 50 V CC.	0657473	2 B
C434	47μF	25 V EC.	0513470	1, 2 C
C435	0.022μF	$^{+80}_{-20}$% 50 V CC.	0657223	
C436	220μF	25 V EC.	0513221	
TR401	2SC871 (F)		0305472	1 C
TR402	2SA678 (6)		0300291	1, 2 B
TR403	2SC871 (F)		0305472	1 A
TR404			0305472	1 A
TR405	2SC634A (6)		0305891	2 A
TR406			0305891	2 A
TR407	2SC711 (E, F)		0305731, 2	2 C
TR408			0305731, 2	2 C
TR409			0305731, 2	2 C
TR410			0305731, 2	2 C
TR411			0305731, 2	2 B
TR412	2SC634A (6)		0305891	2 B
TR413	2SC711 (E, F)		0305731, 2	2 B
TR414			0305731, 2	2 B
TR415	2SA678 (6)		0300291	2 B
TR416	2SC711 (E, F)		0305731, 2	2 C

W	X	Y	Z
D401	IS953	0311050	1 C
D402		0311050	1 C
D403	IN60P	0311060	1 B
D404		0311060	1 B
D405		0311060	1 B
D406		0311060	1 B
D407	IN34A	0310400	2 C
L401	MPX Coil	4240660	1 B , C
L402	2.2mH Micro Inductor	4900090	1 C
L403		4900090	1 C
L404	MPX Coil	4240650	1 B
L405	1mA Micro Inductor	4900120	2 C
L406	MPX Coil	4240640	1 C
L407		4240570	2 A
L408		4240570	1 A
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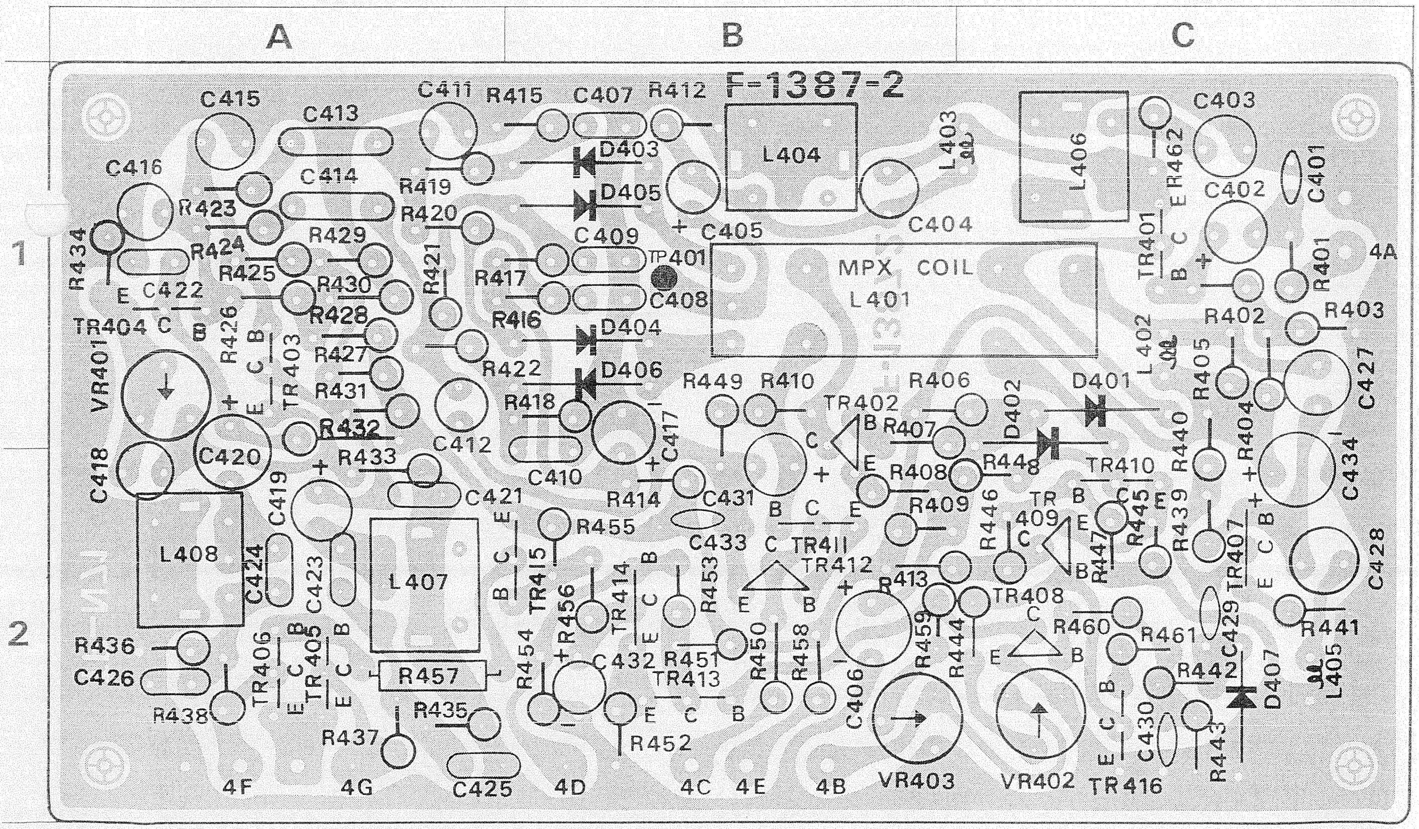
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PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

AM IF BLOCK ⟨F-1417C⟩

Stock No. 7530230

W	X	Y	Z
R301	10kΩ ±10% ¼W CR.	0101103	1, 2C
R302	1kΩ	0101102	1, 2C
R303	3.3kΩ	0101332	2C
R304	100Ω	0101101	1C
R305	10kΩ	0101103	1C
R306	10kΩ	0101103	2B, C
R307	22Ω	0101220	2C
R308	1kΩ	0101102	1C
R309	470Ω	0101471	2C
R310	100Ω	0101101	1, 2C
R311	47Ω	0101470	1B, C
R312	1kΩ	0101102	1B
R313	22kΩ	0101223	1B, C
R314	1kΩ	0101102	1C
R315	3.3kΩ	0101332	1C
R316	1kΩ	0101102	2B
R317	150kΩ	0101151	1B
R318	5.6kΩ	0101562	1B
R319	10kΩ	0101103	2B
R320	1.5kΩ	0101152	2B
R321	100kΩ	0101104	2B
R322	100Ω	0101101	2B
R323	47Ω	0101470	2B
R324	4.7kΩ	0101472	2B
R325	10kΩ	0101103	2B
R326	1.8kΩ	0101182	1B
R327	1kΩ	0101102	2A
R328	100Ω	0101101	1A, B
R329	1.8kΩ	0101182	1A, B
R330	1kΩ	0101102	2A
R331	10kΩ	0101103	1A
R332	18kΩ	0101183	1A
R333	10kΩ	0101103	1A
R334	47kΩ	0101473	2A
R335	15kΩ	0101153	1B
R336	22kΩ	0101223	1B
R337	100Ω	0101101	1B
R338	2.2kΩ	0101222	1A, B
R339	1kΩ	0101102	1A
R340	100Ω	0101101	2A
VR301	10kΩ (B) AM Meter Adj.	1035130	1A
C301	0.022μF $^{+80}_{-20}\%$ 25 V CC.	0656223	1C
C302	1μF 50 V EC.	0515109	1C
C303	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	1C
C304	0.047μF	0656473	2C
C305	0.022μF	0656223	2C
C306	0.047μF	0656473	2C
C307	1μF 50 V EC.	0515109	2C
C308	0.047μF $^{+80}_{-20}\%$ 50 V CC.	0656473	2C
C309	0.047μF	0656473	2C
C310	0.047μF	0656473	2C
C311	0.01μF ±10% 50 V MC.	0601107	1C
C312	430pF ±5% 50 V SC.	0620431	1B
C313	0.01μF ±10% 50 V MC.	0601107	1C
C314	10pF ±10% 50 V CC.	0660100	1C
C315	15pF	0660150	1B
C316	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	1C
C317	0.047μF	0656473	1B
C318	10μF 16 V EC.	0512100	1B
C319	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	1B
C320	0.047μF	0656473	2B
C321	1μF 50 V EC.	0515109	1B
C322	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	2B
C323	0.047μF	0656473	2B
C324	0.047μF	0656473	2B
C325	0.047μF	0656473	2A
C326	47pF ±10% 50 V CC.	0660470	2A, B
C327	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0657473	2A
C328	0.047μF	0657473	1A
C329	4.7μF 25 V EC.	0513479	1A
C330	0.0047μF ±10% 50 V MC.	0601476	2A
C332	0.01μF	0601107	1A
C333	0.0047μF	0601476	2A
C334	0.01μF	0601107	1, 2A
C335	0.01μF	0601107	2A
C336	0.01μF	0601107	1A
C337	0.047μF	0601477	2A
C338	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	1B
C339	47μF 16 V EC.	0512470	1B
C340	0.047μF $^{+80}_{-20}\%$ 25 V CC.	0656473	1B
C341	0.022μF	0656223	1B
C342	0.022μF	0656223	1A
C343	0.022μF	0656223	1A
C344	100μF 6.3 V EC.	0515101	1A
TR301	2SC403C (4)	0305992	2C
TR302		0305992	2C
TR303	2SC403C (3)	0305991	1C
TR304	2SC403C (4)	0305992	1B
TR305		0305992	2B
TR306	2SC403C (3)	0305991	1B
D301	IN60	0310330	1C
D302	IS1007	0311090	2A
D303	IN60	0310330	1A
D304		0310330	1A
T301	AM RF Coil	4210180	2C
T302	Ceramic Filter YEL-455E2	0910180	2B, C
T303	AM OSC Coil	4220480	1A, B
T304	AM IFT	4230590	2B
T305	AM IFT	4230600	2B
T306	AM IFT	4230580	2A
L301	10μH Micro Inductor	4900160	2C
L302	59mH Coil	4290200	2A
L303		4290200	2A
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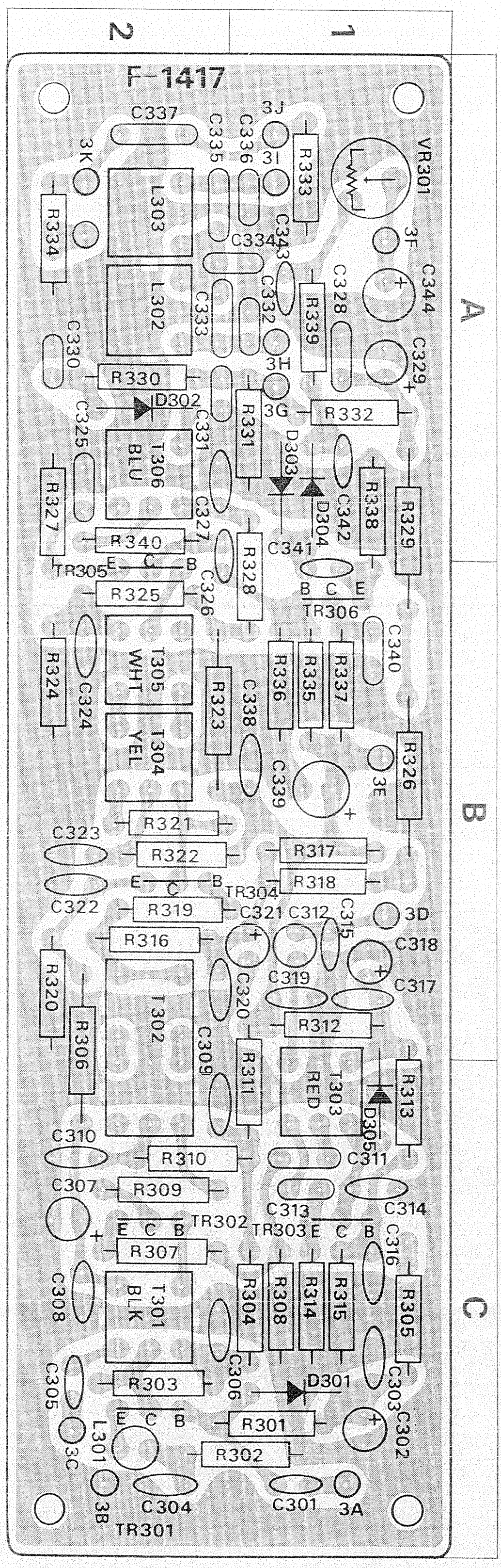
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T306 BLU
T305 WHT
T304 YEL
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T303 RED
T301 BLK
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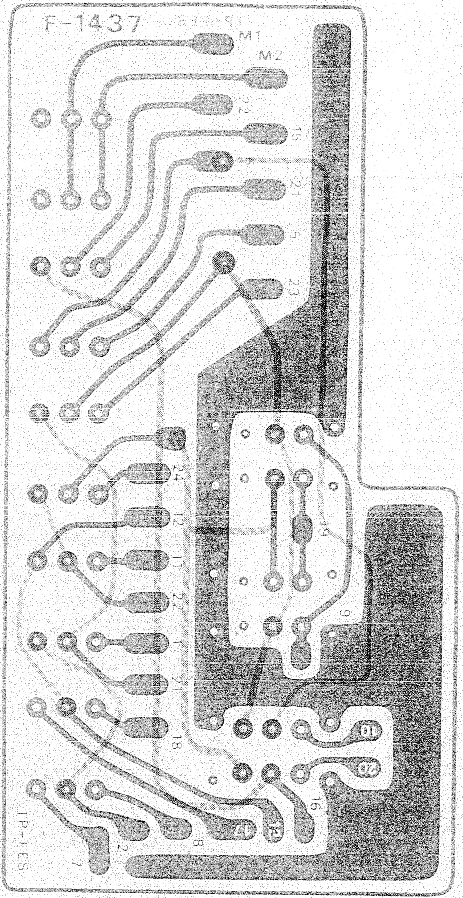
ACCESSORY (A) BLOCK 〈F-1437〉

Stock No. 7591170

W	X	Y
S2	N.R. Adaptor Switch	1130610
S3	Tape Mon-1 Switch	
S4	Tape Mon-2 Switch	
S5	4Ch. Adaptor Switch	
S13	FM Muting Off Switch	
S2′	(N.R. Adaptor Switch)	1110210
S3′	(Tape Mon-1 Switch)	1110210
S4′	(Tape Mon-2 Switch)	1110210
	F-1437 Printed Circuit Board	2591170


F-1437
TP-FES
M1
M2
22
15
6
21
5
23
24
12
11
22
1
21
18
19
9
10
20
16
17
14
8
2
7

PRINTED CIRCUIT BOARDS AND PARTS LIST

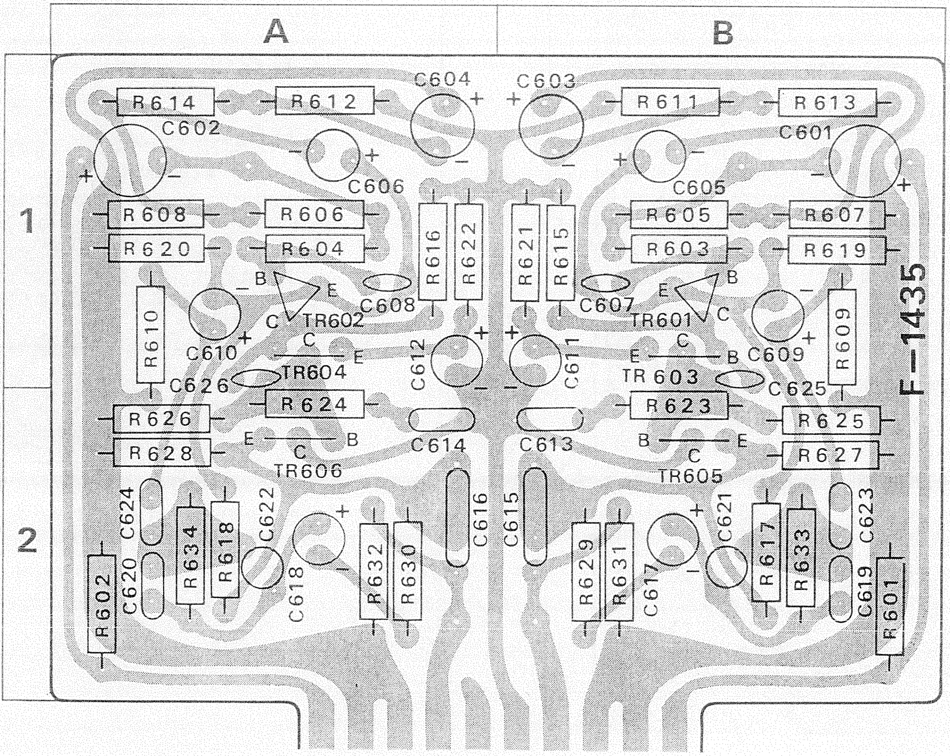
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

EQUALIZER BLOCK 〈F-1435〉

Stock No. 7550410

W	X		Y	Z
R601	47kΩ	±10% ¼W CR.	0101473	2 B
R602	47kΩ		0101473	2 A
R603	3.3kΩ		0101332	1 B
R604	3.3kΩ		0101332	1 A
R605	47kΩ		0101473	1 B
R606	47kΩ		0101473	1 A
R607	47kΩ		0101473	1 B
R608	47kΩ		0101473	1 A
R609	680Ω		0101681	1, 2 B
R610	680Ω		0101681	1, 2 A
R611	100kΩ		0101104	2 B
R612	100kΩ		0101104	2 A
R613	220kΩ		0101224	1 B
R614	220kΩ		0101224	1 A
R615	22kΩ		0101223	1 B
R616	22kΩ		0101223	1 A
R617	470kΩ		0101474	2 B
R618	470kΩ		0101474	2 A
R619	27kΩ		0101273	2 B
R620	27kΩ		0101273	2 A
R621	3.3kΩ		0101332	2 B
R622	3.3kΩ		0101332	2 A
R623	180Ω		0101181	2 B
R624	180Ω		0101181	2 A
R625	47kΩ		0101473	2 B
R626	47kΩ		0101473	2 A
R627	10kΩ		0101103	2 B

W	X		Y	Z
R628	10kΩ	±10% ¼W CR.	0101103	2 A
R629	1kΩ		0101102	2 B
R630	1kΩ		0101102	2 A
R631	33kΩ		0101333	2 B
R632	33kΩ		0101333	2 A
R633	33kΩ		0101333	2 B
R634	33kΩ		0101333	2 A
C601	3.3μF	25 V TC.	0573339	1 B
C602	3.3μF		0573339	1 A
C603	47μF	50 V EC.	0515470	1 B
C604	47μF		0515470	1 A
C605	10μF		0515100	1 B
C606	10μF		0515100	1 A
C607	33pF	±10% 50 V CC.	0660330	1 B
C608	33pF		0660330	1 A
C609	47μF	10 V EC.	0511470	1 B
C610	47μF		0511470	1 A
C611	33μF	6.3 V EC.	0510330	1 B
C612	33μF		0510330	1 A
C613	470pF	±5% 50 V MiC.	0640471	2 B
C614	470pF		0640471	2 A
C615	0.47μF	±10% 50 V MC.	0601478	2 B
C616	0.47μF		0601478	2 A
C617	10μF	25 V EC.	0513100	2 B
C618	10μF		0513100	2 A

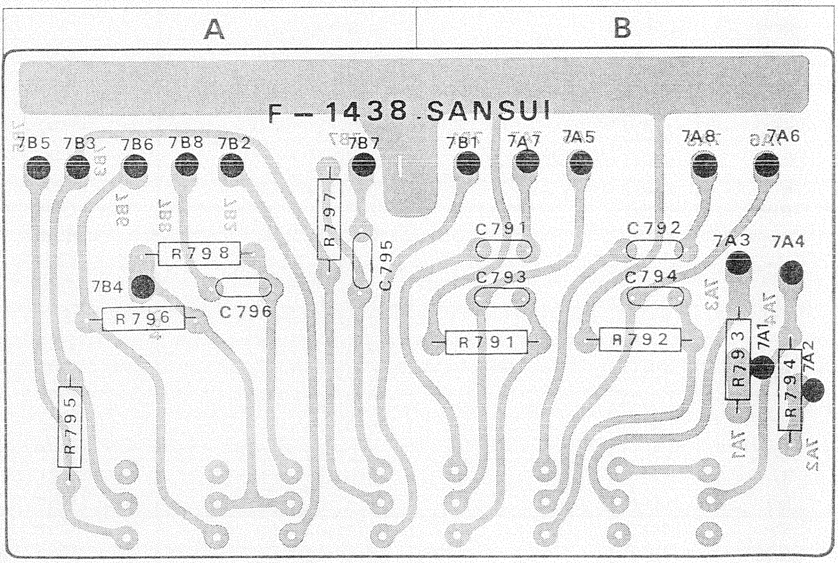

A
B
1
2
F-1435
R614
R612
C604
C603
R611
R613
C602
C601
C606
C605
R608
R606
R605
R607
R620
R604
R603
R619
R616
R622
R621
R615
TR602
C608
C607
TR601
R610
C610
C612
C611
C609
R609
TR604
TR603
C626
C625
R624
R623
R626
R625
R628
R627
TR606
C614
C613
TR605
C624
C620
R634
R618
C622
C618
R632
R630
C616
C615
R629
R631
C617
C621
R617
R633
C623
C619
R602
R601
B
C
E

W	X		Y	Z
C619	0.0022μF	±10% 50 V MC.	0601226	2 B
C620	0.0022μF		0601226	2 A
C621	470pF	±10% 50 V SC.	0621471	2 B
C622	470pF		0621471	2 A
C623	0.0068μF	±10% 50 V MC.	0601686	2 B
C624	0.0068μF		0601686	2 A
C625	22pF	±10% 50 V CC.	0660220	2 B
C626	22pF		0660220	2 A
TR601	2SA640 (L, M)		0300301, 2	1 B
TR602			0300301, 2	1 A
TR603	2SC1222 (E)		0306012	1 B
TR604			0306012	1 A
TR605	2SA640 (L, M)		0300301, 2	2 B
TR606			0300301, 2	2 A
	F-1435 Printed Circuit Board		2550320	

ACCESSORY (B) BLOCK 〈F-1438〉

Stock No. 7591180

W	X		Y	Z
R791	22kΩ	±10% ¼W CR.	0101223	B
R792	22kΩ		0101223	B
R793	12kΩ		0101123	B
R794	12kΩ		0101123	B
R797	470kΩ		0101474	A
R798	470kΩ		0101474	A
C791	390pF	±5% 50 V MiC.	0640391	B
C792	390pF		0640391	B
C793	0.02μF	±10% 50 V MC.	0601207	B
C794	0.02μF		0601207	B
C795	0.008μF		0601806	A
C796	0.008μF		0601806	A
S6	Mono Switch		1130600	
S7	Loudness Switch			
S8	High Filter Switch			
S9	Low Filter Switch			
	F-1438 Printed Circuit Board		2591180	


A
B
F – 1438 SANSUI
7B5
7B3
7B6
7B8
7B2
7B7
7B1
7A7
7A5
7A8
7A6
R797
C795
C791
C792
7A3
7A4
R798
7B4
C796
C793
C794
R796
R791
R792
R793
7A1
R794
7A2
R795

PRINTED CIRCUIT BOARDS AND PARTS LIST

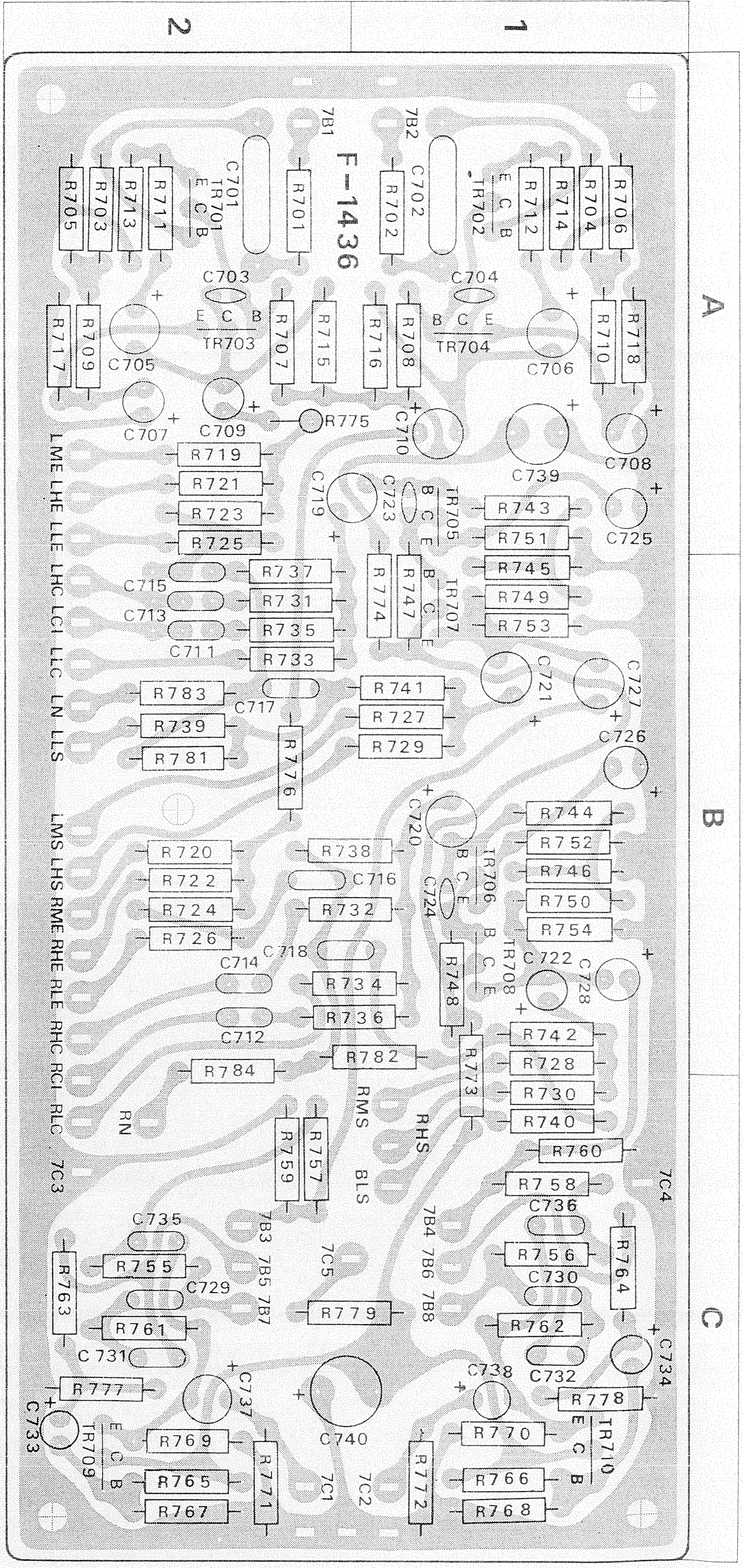
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

TONE CONTROL BLOCK 〈F-1436〉

Stock No. 7560560

W	X		Y	Z
R701	2.7kΩ	±10% ¼W CR.	0101272	2 A
R702	2.7kΩ		0101272	1 A
R703	150kΩ		0101154	2 A
R704	150kΩ		0101154	1 A
R705	330kΩ		0101334	2 A
R706	330kΩ		0101334	1 A
R707	100kΩ		0101104	2 A
R708	100kΩ		0101104	1 A
R709	120kΩ		0101124	2 A
R710	120kΩ		0101124	1 A
R711	18kΩ		0101183	2 A
R712	18kΩ		0101183	1 A
R713	2.7kΩ		0101272	2 A
R714	2.7kΩ		0101272	1 A
R715	3.3kΩ		0101332	2 A
R716	3.3kΩ		0101332	1 A
R717	470Ω		0101471	2 A
R718	470Ω		0101471	1 A
R719	3.3kΩ		0101332	2 A
R720	3.3kΩ		0101332	2 B
R723	3.9kΩ		0101392	2 A
R724	3.9kΩ		0101392	2 B
R725	1.2kΩ		0101122	2 A
R726	1.2kΩ		0101122	2 B
R727	3.3kΩ		0101332	1, 2 B
R728	3.3kΩ		0101332	1 B
R729	680Ω		0101681	1, 2 B
R730	680Ω		0101681	1 C
R731	220Ω		0101221	2 B
R732	220Ω		0101221	1, 2 B
R733	5.6kΩ		0101562	2 B
R734	5.6kΩ		0101562	1, 2 B
R735	12kΩ		0101123	2 B
R736	12kΩ		0101123	1, 2 B
R737	12kΩ		0101123	2 B
R738	12kΩ		0101123	1, 2 B
R739	1.2kΩ		0101122	2 B
R740	1.2kΩ		0101122	1 C
R741	3.9kΩ		0101392	1, 2 B
R742	3.9kΩ		0101392	1 B
R743	100kΩ		0101104	1 A
R744	100kΩ		0101104	1 B
R745	100kΩ		0101104	1 B
R746	100kΩ		0101104	1 B
R747	8.2kΩ		0101822	1 B
R748	8.2kΩ		0101822	1 B
R749	470kΩ		0101474	1 B
R750	470kΩ		0101474	1 B
R751	680Ω		0101681	1 A
R752	680Ω		0101681	1 B
R753	3.3kΩ		0101332	1 B
R754	3.3kΩ		0101332	1 B
R755	2.7kΩ		0101272	2 C
R756	2.7kΩ		0101272	1 C
R757	1.5kΩ		0101152	1 C
R758	1.5kΩ	±10% ¼W CR.	0101152	1 C
R759	47kΩ		0101473	2 C
R760	47kΩ		0101473	1 C
R761	47kΩ		0101473	2 C
R762	47kΩ		0101473	1 C
R763	1kΩ		0101102	1 C
R764	1kΩ		0101102	1 C
R765	220kΩ		0101224	1 C
R766	220kΩ		0101224	1 C
R767	150kΩ		0101154	1 C
R768	150kΩ		0101154	1 C
R769	5.6kΩ		0101562	1 C
R770	5.6kΩ		0101562	1 C
R771	47kΩ		0101473	1 C
R772	47kΩ		0101473	1 C
R773	100Ω		0101101	1 B, C
R774	100Ω		0101101	1 A, B
R775	4.7Ω		0100479	2 C
R776	4.7Ω		0100479	2 B
R777	470kΩ		0101474	1 C
R778	470kΩ		0101474	1 C
R779	100Ω		0101101	1, 2 C
C701	0.47μF	±10% 50 V MC.	0601478	2 A
C702	0.47μF		0601478	1 A
C703	68pF	±10% 50 V CC.	0660680	2 A
C704	68pF		0660680	1 A
C705	33μF	6.3 V EC.	0510330	2 A
C706	33μF		0510330	1 A
C707	33μF	25 V EC.	0510330	2 A
C708	33μF		0510330	1 A
C709	10μF	50 V EC.	0515100	2 A
C710	10μF		0515100	1 A
C711	0.01μF	±20% 50 V MC.	0601107	2 B
C712	0.01μF		0601107	2 B
C713	0.0033μF		0601336	2 B
C714	0.0033μF		0601336	2 B
C715	0.033μF		0601337	2 B
C716	0.033μF		0601337	2 B
C717	0.033μF		0601337	2 B
C718	0.033μF		0601337	1, 2 B
C719	3.3μF	50 V EC.	0515339	1, 2 A
C720	3.3μF		0515339	1 B
C721	10μF		0515100	1 B
C722	10μF		0515100	2 B
C723	100pF	±10% 50 V CC.	0660101	1 A
C724	100pF		0660101	1 B
C725	33μF	6.3 V EC.	0510330	1 A
C726	33μF		0510330	1 B
C727	2.2μF	±20% 25 V TC.	0573229	2 B
C728	2.2μF		0573229	1 B
C729	0.04μF	±10% 50 V MC.	0601407	2 C
C730	0.04μF		0601407	1 C
C731	0.03μF		0601307	2 C
C732	0.03μF		0601307	1 C

W	X	Y	Z
C733	0.68 μF ±20% 25 V TC.	0573688	2 C
C734	0.68 μF	0573688	1 C
C735	0.022 μF ±10% 50 V MC.	0601227	2 C
C736	0.022 μF	0601227	1 C
C737	1 μF ±20% 25 V TC.	0573109	2 C
C738	1 μF	0573109	1 C
C739	100 μF 35 V EC.	0514101	1 A
C740	100 μF 50 V EC.	0515101	1, 2 C
TR701	2SA640 (M, L)	0300301,2	2 A
TR702		0300301,2	1 A
TR703		0300301,2	2 A
TR704		0300301,2	1 A
TR705		0300301,2	1 A
TR706		0300301,2	1 B
TR707		0300301,2	1 B
TR708		0300301,2	1 B
TR709		0300301,2	2 C
TR710		0300301,2	1 C
	F-1436 Printed Circuit Board	2560520	


2
1
A
B
C
F-1436
7B1
7B2
C701
TR701
E C B
C702
TR702
E C B
R705
R703
R713
R711
R701
R702
R712
R714
R704
R706
C703
C704
E C B
TR703
B C E
TR704
R717
R709
C705
R707
R715
R716
R708
R710
R718
C706
C707
C709
R775
C710
C739
C708
R719
R721
R723
R725
C719
C723
TR705
B C E
R743
R751
C725
R737
R731
R735
R733
C715
C713
C711
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B C E
R745
R749
R753
R783
R739
R781
C717
R776
R741
R727
R729
C721
C727
C726
LME LHE LLE LHC LCI LLC LN LLS
LMS LHS RME RHE RLE RHC RCI RLC
R720
R722
R724
R726
R738
C716
R732
C720
TR706
B C E
C724
R744
R752
R746
R750
R754
C714
C718
R734
R736
C712
R748
TR708
B C E
C722
C728
R742
R728
R730
R740
R782
R784
R773
RN
RMS
RHS
BLS
R759
R757
R760
R758
C736
7C3
7C4
C735
7B3 7B5 7B7
7C5
7B4 7B6 7B8
R755
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C731
R779
R756
C730
R764
R762
C734
C738
C732
R777
C737
C740
R778
C733
TR709
E C B
R769
R765
R767
R771
7C1
7C2
R772
R770
R766
R768
TR710
E C B

LAMP HOLDER BLOCK 〈F-1205〉

Stock No. 7590520

W	X	Y
PL006	6.3V 0.25A Pilot Lamp (Fuse Type)	0420020
PL007		0420020
PL008		0420020
PL009		0420020
PL010		0420020
	Fuse Holder (× 10)	2310050
	F-1205 Printed Circuit Board	2590520

PRINTED CIRCUIT BOARDS AND PARTS LIST

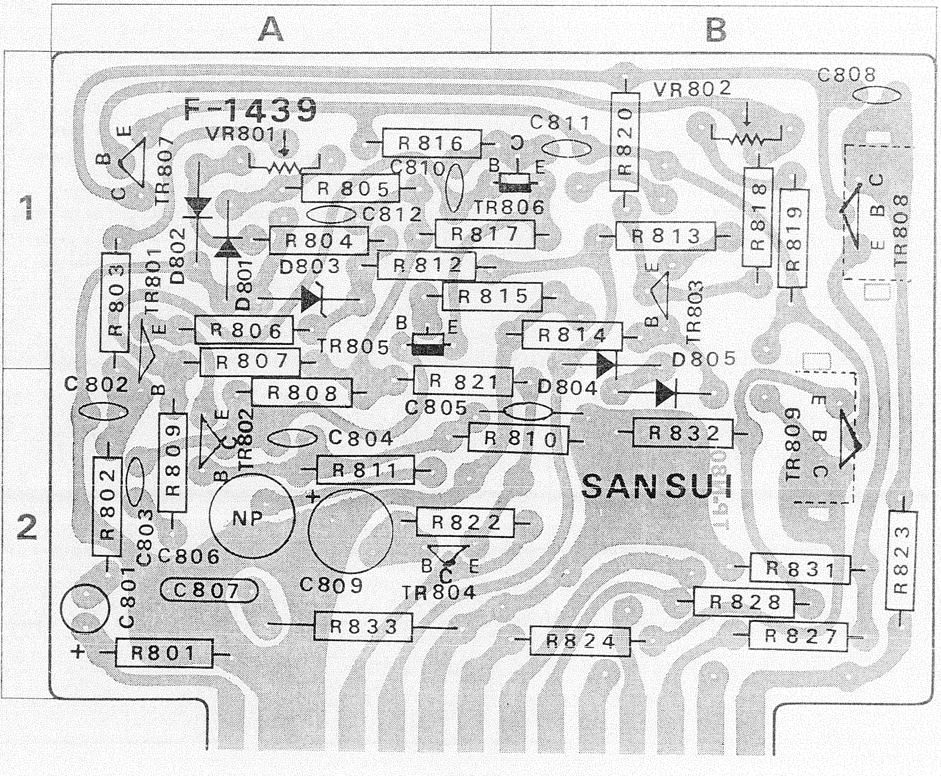
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

DRIVER BLOCK 〈F-1439〉

Stock No. 7570660

W	X		Y	Z
R801	470kΩ	±10% ¼W CR.	0101474	2 A
R802	10kΩ		0101103	2 A
R803	100kΩ		0101104	1 A
R804	8.2kΩ		0101822	1 A
R805	47kΩ		0101473	1 A
R806	10kΩ		0101103	1 A
R807	6.8kΩ		0101682	1 A
R808	6.8kΩ		0101682	2 A
R809	220Ω		0101221	2 A
R810	100kΩ		0101104	2 A, B
R811	3.9kΩ		0101392	2 A
R812	8.2kΩ		0101822	1 A
R813	470Ω		0101471	1 B
R814	47kΩ		0101472	1 B
R815	100Ω		0101101	1 A, B
R816	100Ω		0101101	1 A, B
R817	470Ω	±10% ½W CR.	0103471	1 A, B
R818	5.6kΩ	±10% ¼W CR.	0101562	1 B
R819	1.5kΩ		0101152	1 B
R820	33Ω		0101330	1 B
R821	6.8Ω		0101689	2 A, B
R822	4.7kΩ		0101472	2 A, B
R823	10Ω	±10% ½W CR.	0103100	2 B
R824	10Ω		0103100	2 B
R827	6.8Ω	±10% ¼W CR.	0101689	2 B
R828	6.8Ω		0101689	2 B

W	X		Y	Z
R831	220Ω	±10% ¼W CR.	0101221	2 B
R832	220Ω		0101221	2 B
R833	10Ω	±10% 2W CR.	0152100	2 A
VR801	5kΩ (B)		1031090	1 A
VR802	1kΩ (B)		1031050	1 B
C801	1.5μF	±20% 25V TC.	0573159	2 A
C802	47pF	±10% 50 V CC.	0660470	1, 2 A
C803	0.001μF	$^{+80}_{-20}$% 50 V CC.	0657102	2 A
C804	22pF	±10% 50 V CC.	0660220	2 A
C805	15pF		0660150	2 A, B
C806	100μF	10 BpEC.	0531101	2 A
C807	0.1μF	±10% 50 V MC.	0601108	2 A
C808	470pF	±10% 50 V	0660470	1 B
C809	47μF	50 V EC.	0515470	2 A
C810	22pF	±10% 50 V CC.	0660220	1 A
C811	0.0022μF	$^{+80}_{-20}$% 50 V CC.	0657222	1 B
TR801	2SA640 (L_1, L_2)		0300302,4	1 A
TR802			0300302,4	2 A
TR803	2SA678 Qrange (6, 7)		0300421,2	1 B
TR804			0300421,2	2 A
TR805	2SC983 (O, R)		0306021,2	1 A
TR806			0306021,2	1 A, B
TR807	2SC984 (C)		0305872	1 A


A
B
1
2
F-1439
VR801
VR802
C808
C811
C810
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R810
R821
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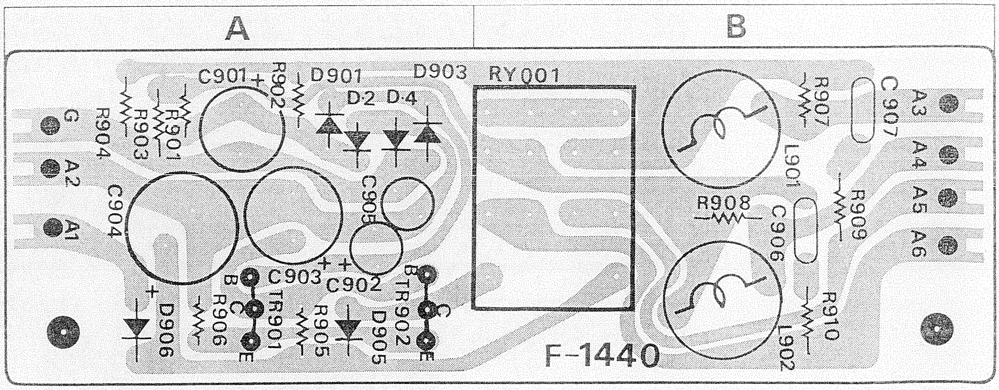
R832
R831
R828
R827
R824
R833
R801
R823
TR801
TR802
TR803
TR804
TR805
TR806
TR807
TR808
TR809
D801
D802
D803
D804
D805
C801
C802
C803
C804
C805
C806
C807
C809
NP
SANSUI
B
C
E
+

W	X	Y	Z
TR808	2SC1124 (2, 3)	0305901, 2	2 A
TR809	2SA706 Green (2)	0300401	2 B
D801	1S953	0311050	1 A
D802		0311050	1 A
D803	RD-9A (M)	0315220	1 A
D804	1S953	0311050	2 B
D805		0311050	1 B
	F-1439 Printed Circuit Board	2570450	

PROTECTOR BLOCK ⟨F-1440⟩

Stock No. 7598110

W	X	Y	Z
R901	47kΩ ±10% ¼W CR.	0100473	A
R902	47kΩ	0100473	A
R903	3.3kΩ	0100332	A
R904	3.3kΩ	0100332	A
R905	82kΩ	0100823	A
R906	10Ω	0100100	A
R907	10Ω	0101100	B
R908	10Ω	0101100	B
C901	47μF 6.3 V BpEC.	0530470	A
C902	1μF 50 V EC.	0515109	A
C903	220μF 6.3 V EC.	0510221	A
C904	100μF 50 V EC.	0515101	A
C905	1μF 50 V BpEC.	0535109	A
TR901	2SC634A (7, 8)	0305892, 3	A
TR902		0305892, 3	A
D901	IN34A	0310402	A
D902		0310402	A
D903		0310402	A
D904		0310402	A
D905	F-14A	0310940	A
D906		0310940	A
L901	2.5μH Inductor	4290210	B
L992		4290210	B
RY901	Rellay MAT4B-C	1150100	B
	F-1440 Printed Circuit Board	2598110	


A
B
C901
R902
D901
D903
RY001
D2
D4
G
R904
R903
R901
A2
A1
C904
C905
C903
C902
B
C
E
TR901
R906
R905
D906
D905
TR902
R907
C 907
A3
A4
A5
A6
L901
R908
C906
R909
R910
L902
F-1440

PRINTED CIRCUIT BOARDS AND PARTS LIST

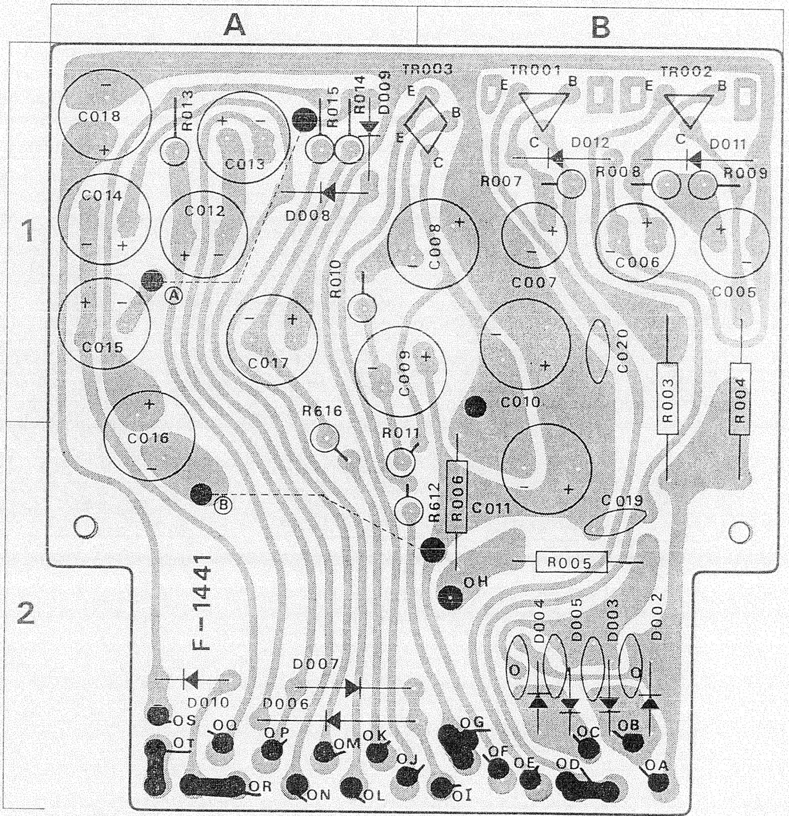
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

POWER SUPPLY BLOCK 〈F-1441〉

Stock No. 7500670

W	X	Y	Z
R003	330Ω ±10% 3W CeR.	0163331	1, 2 B
R004	390Ω	0163391	1, 2 B
R005	47Ω ±10% 1W CR.	0104470	2 B
R006	47Ω	0104470	2 B
R007	4.7kΩ ±10% ¼W CR.	0100472	1 B
R008	2.2kΩ	0100222	1 B
R009	1.5kΩ	0100152	1 B
R010	1.5kΩ	0100152	1 A
R011	1.5kΩ	0100152	2 A, B
R012	47Ω	0100470	2 B
R013	47Ω	0100470	1 A
R014	100Ω	0100101	1 A
R015	100Ω	0100101	1 A
R016	100Ω	0100101	2 A
C005	220μF 25 V EC.	0513221	1 B
C006	220μF	0513221	1 B
C007	100μF	0513101	1 B
C008	220μF 50 V EC.	0515221	1 A, B
C009	220μF	0515221	1 A, B
C010	220μF	0515221	1 B
C011	220μF	0515221	2 B
C012	1000μF 6.3 V EC.	0510102	1 A
C013	1000μF	0510102	1 A

W	X	Y	Z
C014	1000μF 6.3 V EC.	0510102	1 A
C015	1000μF	0510102	1 A
C016	220μF 75 V EC.	0519302	1, 2 A
C017	100μF	0519301	1 A
C018	470μF 10 V EC.	0511471	1 A
C019	0.047μF $^{+80}_{-20}$% 50 V CC.	0657473	2 B
C020	0.047μF	0657473	1 B
TR001	2SD330 (E)	0308362	1 B
TR002		0308362	1 B
TR003	2SB514 (D, E)	0303251, 2	1 A, B
D002	F-14A	0310940	2 B
D003		0310940	2 B
D004		0310940	2 B
D005		0310940	2 B
D006		0310940	2 A
D007		0310940	2 A
D008		0310940	1 A
D009		0310940	1 A
D010		0310940	2 A
D011	RD-13A (M)	0315310	1 B
D012	RD-24A (M)	0315410	1 B
	F-1441 Printed Circuit Board	2500550	


A
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C018
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R616
R011
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R612
R006
C011
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OTHER PARTS AND THEIR LOCATION ON CHASSIS

OTHER PARTS

W	X	Y
R001	3.3kΩ ±10% 1W MFR.	0171332
R002	3.3kΩ	0171332
R017	22Ω ±10% ¼W CR.	0101220
R018	560Ω ±10% 1W MFR.	0171561
R019	560Ω	0171561
R020	22Ω ±10% ½W SR.	0101472
R021	100kΩ ±10% ¼W CR.	0101104
R022	100kΩ	0101104
R023	330kΩ	0101334
R024	330kΩ	0101334
R025	47Ω	0101470
R7001	1.5kΩ ±10% ¼W CR.	0100152
R7002	1.5kΩ	0100152
R7003	2.2kΩ	0100222
R7004	2.2kΩ	0100222
R7005	2.7kΩ	0100272
R7006	2.7kΩ	0100272
R7007	4.7kΩ	0100472
R7008	4.7kΩ	0100472
R7009	6.8kΩ	0100682
R7010	6.8kΩ	0100682
R7011	6.8kΩ	0100682
R7012	6.8kΩ	0100682
R7013	4.7kΩ	0100472
R7014	4.7kΩ	0100472
R7015	3.3kΩ	0100332
R7016	3.3kΩ	0100332
R7017	2.2kΩ	0100222
R7018	2.2kΩ	0100222
R7019	1.5kΩ	0100152
R7020	1.5kΩ	0100152
R7021	2.7kΩ	0100272
R7022	2.7kΩ	0100272
R7023	3.3kΩ	0100332
R7024	3.3kΩ	0100332
R7025	3.3kΩ	0100332
R7026	3.3kΩ	0100332
R7027	4.7kΩ	0100472
R7028	4.7kΩ	0100472
R7029	4.7kΩ	0100472
R7030	4.7kΩ	0100472
R7031	4.7kΩ	0100472
R7032	4.7kΩ	0400472
R7033	4.7kΩ	0100472
R7034	4.7kΩ	0100472
R7035	3.9kΩ	0100392
R7036	3.9kΩ	0100392
R7037	3.3kΩ	0100332
R7038	3.3kΩ	0100332
R7039	2.7kΩ	0100272
R7040	2.7kΩ	0100272
R7041	2.7kΩ	0100272
R7042	2.7kΩ	0100272
R7043	3.3kΩ	0100332
R7044	3.3kΩ	0100332
R7045	4.7kΩ ±10% ¼W CR.	0100472
R7046	4.7kΩ	0100472
R7047	5.6kΩ	0100562
R7048	5.6kΩ	0100562
R7049	5.6kΩ	0100562
R7050	5.6kΩ	0100562
R7051	5.6kΩ	0100562
R7052	5.6kΩ	0100562
R7053	5.6kΩ	0100562
R7054	5.6kΩ	0100562
R7055	3.9kΩ	0100392
R7056	3.9kΩ	0100392
R7057	3.9kΩ	0100392
R7058	3.9kΩ	0100392
R7059	2.7kΩ	0100272
R7060	2.7kΩ	0100272
R861	0.47Ω ±10% 3W CeR.	0153478
R862	0.47Ω	0153478
R863	0.47Ω	0153478
R864	0.47Ω	0153478
VR701,702	250kΩ (MN) Balance Control	1010540, 1
VR703,704	250kΩ (B) × 2 Volume Control	1010550, 1
C001	4700μF 50 V EC.	0559319
C002	4700μF	0559319
C003	1000μF	0559320
C004	1000μF	0559320
C026	0.0047μF 600V OC.	0591476
C027	0.047μF $^{+80}_{-20}\%$ 50 V CC.	0657473
C028	0.047μF	0657473
C029	0.0047μF 600V OC.	0591476
C030	0.033μF 600V OC.	0591337
C031	0.047μF $^{+80}_{-20}\%$ 50 V CC.	0657473
C032~035	0.047μF × 4 50 V CC.	0800121
C038	0.022μF $^{+80}_{-20}\%$ 50 V CC.	0657223
C039	0.022μF	0657223
TR810	2SD316 (2)	0308370
TR811		0308370
TR812	2SB518	0303240
TR813		0303240
	Power Transistor Socket (× 4)	2030020
D001	5B2	0310660
S1	Selector Switch Y-4-11-5	1104230
S10	Speakers Switch Y-2-2-6	1102410
S11	Bass Switch F-2-2-11	1102210, 1
S12	Midrange Switch F-2-2-11	1102210, 1
S13	Treble Switch F-2-2-11	1102210, 1
S14	Power Switch	1130350
PT001	Power Transformer	4001120
L004	AM Bar Antenna	4200540
L005	3.5μH Peaking Coil	4290011
L101	FM Balloon	4290022
L306	3.3μH Micro Inductor	4900100

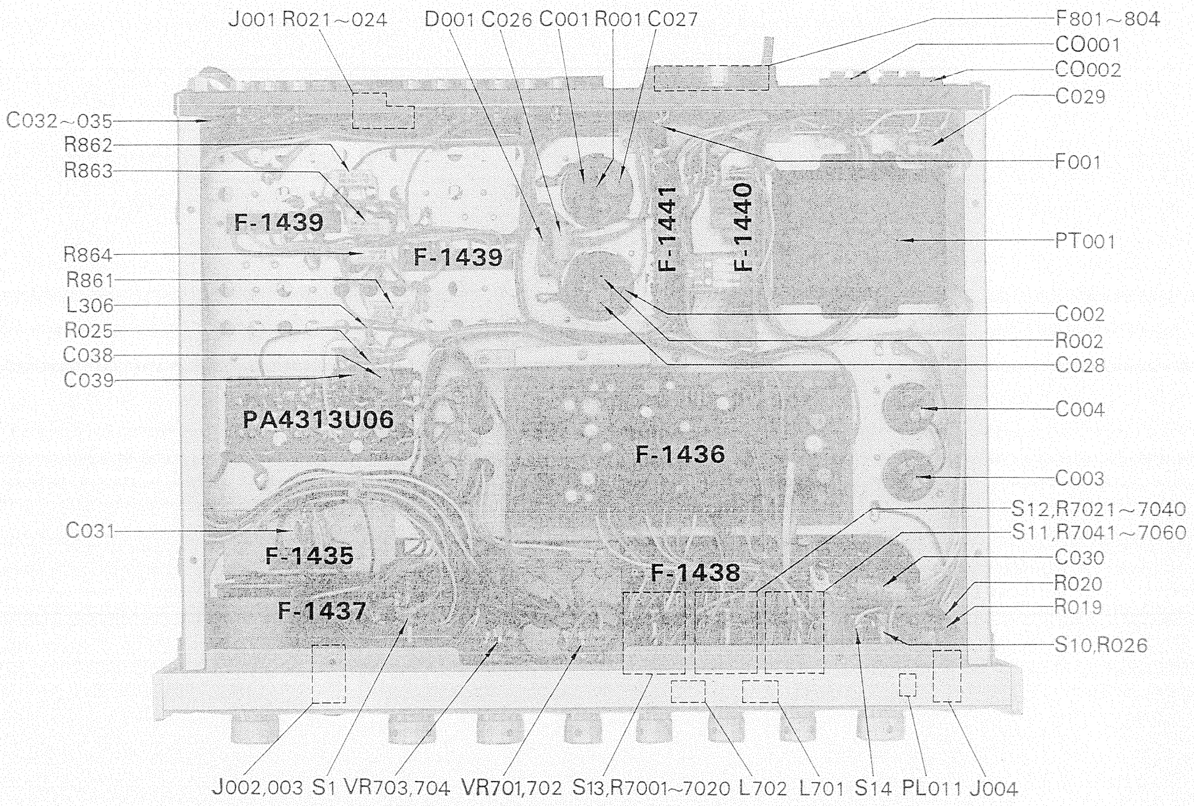
OTHER PARTS AND THEIR LOCATION ON CHASSIS

W: Parts No. **X:** Parts Name **Y:** Stock No.

W	X	Y
L701	Choke Transformer	4010030
L702		4010030
M001	±100μA Tuning Meter	4300320
M002	200μA Signal Meter	4300310
J001	DIN Socket	2430040
J002	Tape Rec-2 Jack	2430060
J003	Tape Mon-2 Jack	2430060
J004	Headphones Jack	2430070
PU001	Voltage Selector Socket	2410080
	Voltage Selector Plug	2410090
CO001,002	AC Outlet (×2)	2450040
F001	5A Power Fuse (100/117V)	0431280
	3A Power Fuse (220/240V)	0431260
F801~804	Power Fuse Holder	2300020
	4A Quick Acting Fuse (×4)	0433270
	Quick Acting Fuse Holder	
PL001	7V 0.16A PHONO-2 Indicator	0400154
PL002	7V 0.16A PHONO-1 Indicator	0400155
PL003	7V 0.16A FM Indicator	0400154

W	X		Y
PL004	7V 0.16A AM Indicator		0400155
PL005	7V 0.16A AUX Indicator		0400153
PL011	7V 0.16A Power Indicator		0400170
PL012	6V 0.1A F-Type Signal Meter Lamp		0420020
PL013	6V 0.1A F-Type Tuning Meter Lamp		0420020
PL014	6.3V 0.075A Dial Pointer Lamp		0400220
PL015	6V 0.1A FM Stereo Indicator		0400161
	AC Power Supply Cord		3800021
	FM Frontend	PA4313U06	2510060
	FM IF Unit	F-1450A	7520540
	MPX Unit	F-1387B	7540670
	AM IF Unit	F-1417B	7530230
	Equalizer Unit	F-1435	7550410
	Multi-Connector		2420030
	Tone Unit	F-1436	7560560
	Accessory Unit (A)	F-1437	7591170
	Accessory Unit (B)	F-1438	7591180
	Driver Unit	F-1439 (×2)	7570660
	Multi-Connector	(×2)	2420040
	Protector Unit	F-1440	7598110
	Power Unit	F-1441	7500670
	Lamp Holder Unit	F-1205	2590520

* Design and specifications subject to change without notice for improvements.


J001 R021~024
D001 C026 C001 R001 C027
F801~804
CO001
CO002
C029
C032~035
R862
R863
F001
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F-1441
F-1440
PT001
R864
F-1439
R861
L306
R025
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C031
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C030
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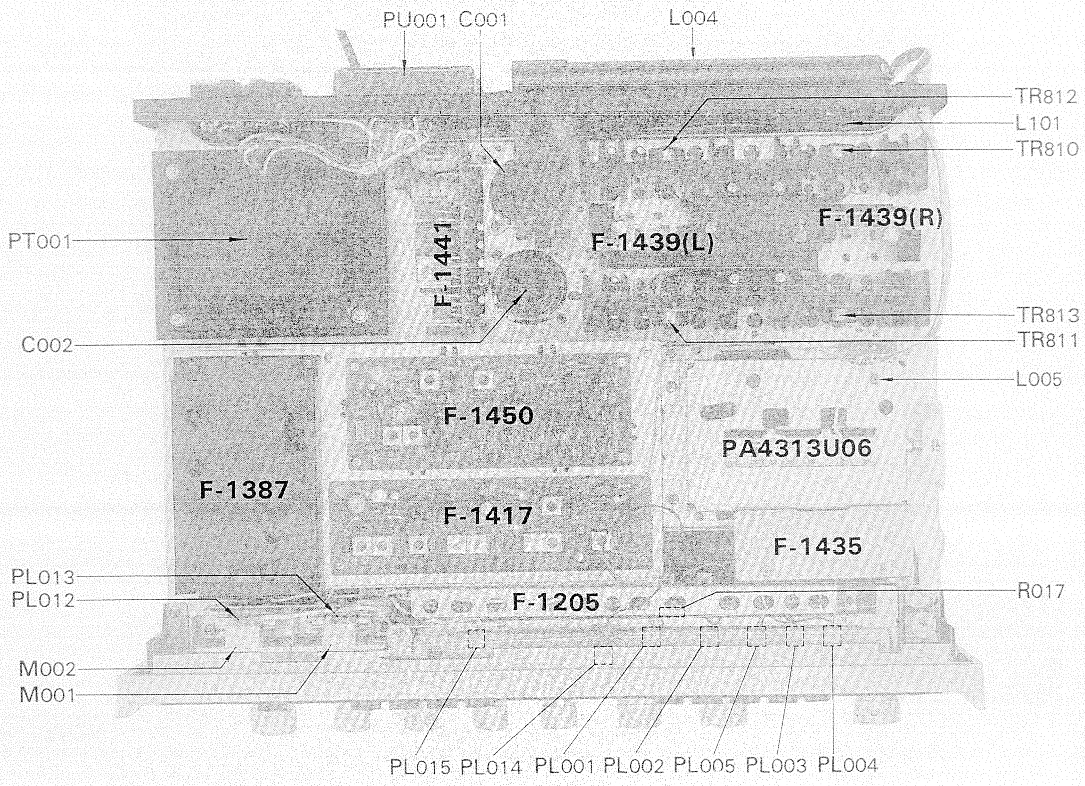
S10,R026
J002,003 S1 VR703,704 VR701,702 S13,R7001~7020 L702 L701 S14 PL011 J004


PU001 C001
L004
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L101
TR810
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PT001
F-1441
F-1439(L)
TR813
C002
TR811
L005
F-1450
PA4313U06
F-1387
F-1417
F-1435
PL013
PL012
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R017
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PL015 PL014 PL001 PL002 PL005 PL003 PL004